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OM protein - protein search, using sw model

Run on: October 26, 2004, 16:39:52 ; Search time 129 Seconds

(without alignments)
1350.249 Million cell updates/sec

Title: US-09-271-584A-2

Perfect score: 2755

Sequence: 1 MLDLSVSKLPSTSDSHASV.....FVPFVGSPTERNPPDL SKA 538

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1364641 seqs, 323758627 residues

Total number of hits satisfying chosen parameters: 1364641

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA.*

- 1: /cgn2_6/prodata/2/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/prodata/2/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/prodata/2/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/prodata/2/pubpaa/US06_PUBCOMB.pep.*
- 5: /cgn2_6/prodata/2/pubpaa/US07_NEW_PUB.pep.*
- 6: /cgn2_6/prodata/2/pubpaa/PCTUS_PUBCOMB.pep.*
- 7: /cgn2_6/prodata/2/pubpaa/US08_NEW_PUB.pep.*
- 8: /cgn2_6/prodata/2/pubpaa/US08_PUBCOMB.pep.*
- 9: /cgn2_6/prodata/2/pubpaa/US09A_PUBCOMB.pep.*
- 10: /cgn2_6/prodata/2/pubpaa/US09B_PUBCOMB.pep.*
- 11: /cgn2_6/prodata/2/pubpaa/US09C_PUBCOMB.pep.*
- 12: /cgn2_6/prodata/2/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/prodata/2/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/prodata/2/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/prodata/2/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/prodata/2/pubpaa/US10D_PUBCOMB.pep.*
- 17: /cgn2_6/prodata/2/pubpaa/US10_NEW_PUB.pep.*
- 18: /cgn2_6/prodata/2/pubpaa/US11_NEW_PUB.pep.*
- 19: /cgn2_6/prodata/2/pubpaa/US60_NEW_PUB.pep.*
- 20: /cgn2_6/prodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	DB ID	Description
1	2755	100.0	538	9	US-09-834-998A-1
2	2444	88.7	546	14	US-10-155-535-2
3	2130.5	77.3	540	15	US-10-425-114-55826, A
4	2112.5	76.7	546	15	US-10-424-599-201549
5	1910.5	69.3	552	14	US-10-155-535-4
6	1886	68.5	546	14	US-10-409-701-23
7	1756	63.7	525	16	US-10-437-963-195062
8	1440.5	52.3	631	16	US-10-437-963-149178
9	1286.5	46.7	338	15	US-10-425-114-48759
10	836	30.3	236	15	US-10-425-114-72854
11	608	22.1	671	15	US-10-415-378-5
12	604	21.9	673	14	US-10-297-022-7
13	595.5	21.6	588	15	US-10-262-511-134

14	593.5	21.5	725	15	US-10-072-012-654	Sequence 654, App
15	590	21.4	641	15	US-10-072-012-246	Sequence 246, App
16	582	21.1	608	10	US-09-991-936-1868	Sequence 1868, Ap
17	581	21.1	666	15	US-10-072-012-656	Sequence 656, App
18	581	21.1	669	9	US-09-834-998A-2	Sequence 2, Appli
19	581	21.1	669	15	US-10-072-012-657	Sequence 657, App
20	581	21.1	669	17	US-10-757-262-88	Sequence 88, Appl
21	581	21.1	669	17	US-10-768-158-40	Sequence 40, Appl
22	576.5	20.9	616	15	US-10-072-012-655	Sequence 655, App
23	575.5	20.9	631	15	US-10-332-447-13	Sequence 2, Appli
24	575.5	20.9	645	14	US-10-217-096-2	Sequence 3, Appli
25	575.5	20.9	645	14	US-10-060-998-3	Sequence 23, Appl
26	575.5	20.9	645	17	US-10-699-156-23	Sequence 49822, A
27	570	20.7	140	16	US-10-767-701-49822	Sequence 180, App
28	565	20.5	526	9	US-09-800-729-180	Sequence 3, Appli
29	564	20.5	633	9	US-09-834-998A-3	Sequence 93, Appli
30	563	20.4	509	9	US-09-800-729-93	Sequence 2187, Ap
31	563	20.4	509	11	US-09-833-245-2187	Sequence 64153, A
32	554.5	20.1	628	15	US-10-425-114-64153	Sequence 7, Appli
33	547	19.9	493	14	US-10-060-998-7	Sequence 6, Appli
34	543	19.7	521	14	US-10-155-535-6	Sequence 4, Appli
35	531.5	19.3	446	14	US-10-217-096-4	Sequence 865, App
36	498	18.1	400	15	US-10-072-012-865	Sequence 52, Appl
37	480.5	17.4	669	15	US-10-138-588-52	Sequence 53921, A
38	479	17.4	171	16	US-10-767-701-53921	Sequence 6, Appli
39	466.5	16.9	896	14	US-10-217-096-6	Sequence 620, App
40	466.5	16.9	896	16	US-10-408-765A-620	Sequence 114, App
41	466.5	16.9	896	17	US-10-757-262-114	Sequence 36, Appl
42	466.5	16.9	896	17	US-10-768-158-36	Sequence 33859, A
43	463	16.8	132	16	US-10-767-701-33859	Sequence 201550,
44	457	16.6	149	15	US-10-424-599-201550	Sequence 508, App
45	455.5	16.5	813	15	US-10-072-012-508	

ALIGNMENTS

RESULT 1

US-09-834-998A-1
; Sequence 1, Application US/09834998A
; Patent US20020178464A1
; GENERAL INFORMATION:
; APPLICANT: Gaxiola, Roberto A.
; APPLICANT: Fink, Gerald R.
; APPLICANT: Alper, Seth L.
; TITLE OF INVENTION: Proton Transporters And Uses In Plants
; FILE REFERENCE: 0399.2004-002
; CURRENT APPLICATION NUMBER: US/09/834,998A
; CURRENT FILING DATE: 2001-04-13
; PRIOR APPLICATION NUMBER: US 09/644,039
; PRIOR FILING DATE: 2000-08-22
; PRIOR APPLICATION NUMBER: US 60/164,808
; PRIOR FILING DATE: 1999-11-10
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 538
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Arabidpsis - AtNhx1
US-09-834-998A-1

Query Match	100.0%;	Score 2755;	DB 9;	Length 538;
Best Local Similarity	100.0%;	Pred. No. 2.5e-249;		
Matches 538;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	MLDLSVSKLPSTSDSHASVVALNLFVALLCACIVLHLEENRWNESITALLIGLGTG	60	
Db	1	MLDLSVSKLPSTSDSHASVVALNLFVALLCACIVLHLEENRWNESITALLIGLGTG	60	
QY	61	VTLLISKGKSHLLVPSFDLFFYLLPPIFNAGFQVKQFFNFVTIMLFGAVGTII	120	

Db 61 VTILLISGKSSHLVSEDLFFIYLLPPIIFNAGFQVKKQFRNFVTIMLFGAVGTII 120
 QY 121 SCTIISLGVTQFFPKKLDIGTDFLDGYLAIGAIFAATDSVCTQLQVNLQDETPLLYSLVFGE 180
 Db 121 SCTIISLGVTQFFPKKLDIGTDFLDGYLAIGAIFAATDSVCTQLQVNLQDETPLLYSLVFGE 180
 QY 181 GVNDAATSVVFNAINQSFDLTHLNHEAAHLLGNFLYLLSTLLGAATGLISAYVVKKL 240
 Db 181 GVNDAATSVVFNAINQSFDLTHLNHEAAHLLGNFLYLLSTLLGAATGLISAYVVKKL 240
 QY 241 YFGRHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHWNVTESSRIITTK 300
 Db 241 YFGRHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHWNVTESSRIITTK 300
 QY 301 HTPATLSFLAETFIIFYVGMALDIDKWSVSDTPTGTSIAVSSILMGLVMVGRAAAFVFP 360
 Db 301 HTPATLSFLAETFIIFYVGMALDIDKWSVSDTPTGTSIAVSSILMGLVMVGRAAAFVFP 360
 QY 361 SFLSNLAKKNQSEKINFNNQVWVWISGLMRGAVSMALAYNKFTTRAGHTDVRGNAMITST 420
 Db 361 SFLSNLAKKNQSEKINFNNQVWVWISGLMRGAVSMALAYNKFTTRAGHTDVRGNAMITST 420
 QY 421 INVCLFSTVFGMLTKPLISYLLPHQNA--TTSMLSDDNTPKSIHIPLLD--QDSFIE 474
 Db 421 INVCLFSTVFGMLTKPLISYLLPHQNA--TTSMLSDDNTPKSIHIPLLD--QDSFIE 474
 QY 475 PSNHNVPDPDSIRGFLTRPTVHYWROFDDSPMRPVFGRGVFPVPGSPTRNPPDL 534
 Db 475 PSNHNVPDPDSIRGFLTRPTVHYWROFDDSPMRPVFGRGVFPVPGSPTRNPPDL 534
 QY 535 LSK 537
 Db 543 LSK 545

RESULT 2

US-10-155-535-2
 ; Sequence 2, Application US/10155535
 ; Publication No. US20030046729A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Blumwald, Eduardo
 ; APPLICANT: Apse, Maris
 ; TITLE OF INVENTION: INCREASING SALT TOLERANCE IN PLANTS BY
 ; EXPRESSION OF VACUOLAR CATION-PROTON ANTI-PORTERS
 ; FILE REFERENCE: 529152000720
 ; CURRENT APPLICATION NUMBER: US/10/155,535
 ; CURRENT FILING DATE: 2002-05-24
 ; PRIOR APPLICATION NUMBER: 09/271,584
 ; PRIOR FILING DATE: 1999-03-18
 ; PRIOR APPLICATION NUMBER: 60/078,474
 ; PRIOR FILING DATE: 1998-03-18
 ; PRIOR APPLICATION NUMBER: 60/116,111
 ; NUMBER OF SEQ ID NOS: 27
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 2
 ; LENGTH: 546
 ; TYPE: PRT
 ; ORGANISM: Arabidopsis thaliana
 ; OTHER INFORMATION: Clone ID: LIB3242-431-A12_FLI.pep
 US-10-155-535-2

Query Match 88.7%; Score 2444; DB 14; Length 546;
 Best Local Similarity 87.7%; Pred. No. 3.8e-220;
 Matches 476; Conservative 31; Mismatches 30; Indels 6; Gaps 2;
 QY 1 MLDLSVSKPLSLSTSDHASVVALNLFVALLCAGIVLGHLEENRWNNESITALLIGLGTG 60
 Db 3 MEASLTSMKLSVSTSDHASVVALNLFVALLCAGIVLGHLEENRWNNESITALLIGLGTG 62
 QY 61 VTILLISGKSSHLVSEDLFFIYLLPPIIFNAGFQVKKQFRNFVTIMLFGAVGTII 120
 Db 63 VILLISRGKNSHLVSEDLFFIYLLPPIIFNAGFQVKKQFRNFVTIMLFGAVGTIV 122
 QY 121 SCTIISLGVTQFFPKKLDIGTDFLDGYLAIGAIFAATDSVCTQLQVNLQDETPLLYSLVFGE 180
 Db 123 SCTIISLGAIQFFPKKLDIGTDFLDGYLAIGAIFAATDSVCTQLQVNLQDETPLLYSLVFGE 182

QY 181 GVNDAATSVVFNAINQSFDLTHLNHEAAHLLGNFLYLLSTLLGAATGLISAYVVKKL 240
 Db 183 GVNDAATSVVFNAINQSFDLTHLNHEAAHLLGNFLYLLSTLLGAATGLISAYVVKKL 242
 QY 241 YFGRHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHWNVTESSRIITTK 300
 Db 243 YFGRHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHWNVTESSRIITTK 302
 QY 301 HTPATLSFLAETFIIFYVGMALDIDKWSVSDTPTGTSIAVSSILMGLVMVGRAAAFVFP 360
 Db 303 HAPATLSFLAETFIIFYVGMALDIDKWSVSDTPTGTSIAVSSILMGLVMVGRAAAFVFP 362
 QY 361 SFLSNLAKKNQSEKINFNNQVWVWISGLMRGAVSMALAYNKFTTRAGHTDVRGNAMITST 420
 Db 363 SFLSNLAKKNQSEKINFNNQVWVWISGLMRGAVSMALAYNKFTTRAGHTDVRGNAMITST 422
 QY 421 INVCLFSTVFGMLTKPLISYLLPHQNA--TTSMLSDDNTPKSIHIPLLD--QDSFIE 474
 Db 423 ITVCLFSTVFGMLTKPLIRYLMPHOKATTSTTSMSSDSTPKSIHIPLLDGQLDSFEL 482
 QY 475 PSNHNVPDPDSIRGFLTRPTVHYWROFDDSPMRPVFGRGVFPVPGSPTRNPPD 534
 Db 483 PGSHQDVFPNLSIRGFLMRPRTVHYWROFDDSPMRPVFGRGVFPVPGSPTRSSHD 542
 QY 535 LSK 537
 Db 543 LSK 545

RESULT 3

US-10-425-114-55826
 ; Sequence 55826, Application US/10425114
 ; Publication No. US20040034688A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Liu, Jingdong
 ; APPLICANT: Zhou, Yihua
 ; APPLICANT: Kovalic, David K.
 ; APPLICANT: Screen, Steven E.
 ; APPLICANT: Tabaska, Jack E.
 ; APPLICANT: Cao, Yongwei
 ; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
 ; FILE REFERENCE: 38-21(53313)B
 ; CURRENT APPLICATION NUMBER: US/10/425,114
 ; CURRENT FILING DATE: 2003-04-28
 ; NUMBER OF SEQ ID NOS: 73128
 ; SEQ ID NO 55826
 ; LENGTH: 540
 ; TYPE: PRT
 ; ORGANISM: Glycine max
 ; FEATURE:
 ; OTHER INFORMATION: Clone ID: LIB3242-431-A12_FLI.pep
 US-10-425-114-55826

Query Match 77.3%; Score 2130.5; DB 15; Length 540;
 Best Local Similarity 77.1%; Pred. No. 9.3e-191;
 Matches 413; Conservative 59; Mismatches 55; Indels 9; Gaps 4;
 QY 4 SLVSKPLSLSTSDHASVVALNLFVALLCAGIVLGHLEENRWNNESITALLIGLGTG 63
 Db 1 SVVSKPLSLSTSDHASVVALNLFVALLCAGIVLGHLEENRWNNESITALLIGLGTG 60
 QY 64 LLSKSKSSHLVSEDLFFIYLLPPIIFNAGFQVKKQFRNFVTIMLFGAVGTIISCT 123
 Db 61 LLSKSKSSHLVSEDLFFIYLLPPIIFNAGFQVKKQFRNFVTIMLFGAVGTIISCT 120
 QY 124 ITS LGVTQFFPKKLDIGTDFLDGYLAIGAIFAATDSVCTQLQVNLQDETPLLYSLVFGE 183
 Db 121 ITS LGATQIFKRLDVGPLEGDFLAIGAIFAATDSVCTQLQVNLQDETPLLYSLVFGE 180
 QY 184 NDATS VVFNAINQSFDLTHLNHEAAHLLGNFLYLLSTLLGAATGLISAYVVKKL 243
 Db 181 NDATS VVFNAINQSFDLTHLNHEAAHLLGNFLYLLSTLLGAATGLISAYVVKKL 240

QY 244 RHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHNVTSSRIITKHTF 303
Db 241 RHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHNVTSSRIITKHSF 300
QY 304 ATLSFLAETFFLYVGMMDALDIDKWRSDPTGTSIAVSSILMGLVMVGRAAFVPLSFL 363
Db 301 ATLSFVAEIFFLYVGMMDALDIEKWKFFVSDSPGTSVATSGVLLGLILLGRAAFVPLSFI 360
QY 364 SNLAKNQSEKINFNMQVVIWWSGLMRGAVSMALAYNKFTAGHTDVRGNAMITSTITV 423
Db 361 SNLAKKSPNEKISFRQOVIWWSGLMRGAVSMALAYNQFTMSGHTSLRSNAIMITSTIV 420
QY 424 CLFSTVVFGLMTPKPLISVLLP-----HQNATSMLSDDNT--PKSIHIDPLD--QDSFIEP 475
Db 421 VLFSTVVFGLMTPKPLIRLLPHTPHHKESSITITDPTSPKSVTIPLLSAQSEVDI 480
QY 476 SGNHNVPREDTSIRGLTRPTTRTVHYWQFDDSPMRPVFGGRGFVPFVPGSPTERN 531
Db 481 DG-HDIHRPSSIRALLTPTTHTVHLWRKFDAPMRPVFGGRGFVPFVPGSPTERN 535

RESULT 4
US-10-424-599-201549
; Sequence 201549, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 201549
; LENGTH: 546
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_24023C.1.pep
US-10-424-599-201549

Query Match 76.7%; Score 2112.5; DB 15; Length 546;
Best Local Similarity 76.7%; Pred. No. 4.6e-189;
Matches 41; Conservative 58; Mismatches 58; Indels 9; Gaps 4;
QY 4 SLVSKLPSTSDSHASVVALNLFVALLCAGIVLGHLEENRWNESITALLIGLGTGTI 63
Db 7 SVVSKLQTLSTSDSHASVVMNLFVALLCGIVLGHLEENRWNESITALLIGVCTGIVI 66
QY 64 LITSKGKSHLLVSEDLFFIYLLPPIIFNAGFOVKKQFFRNFTVIMLFGAVGTIISCT 123
Db 67 LFPGGKSHLLVSEDLFFIYLLPPIIFNAGFOVKKQFFRNFTVIMLFGAIGTISCT 126
QY 124 IISLGVTOFFKKLDIGTDFLDGYLAIGAIFAATDSVCTQLVNLQDETPLLVSIVFGGVV 183
Db 127 IITLGAQIFKRLDVGPLELGDFAIGAIFAATDSVCTQLVNLQDETPLLVSIVFGGVV 186
QY 184 NDATSVVVFNAIQSFDTLHNEAFAHLLGNFLYFLSTLLGAATGLISAVVIKKLY 243
Db 187 NDATSVVFNAINQSFDTLHNEAFAHLLGNFLYFLSTLLGAATGLISAVVIKKLY 246
QY 244 RHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHNVTSSRIITKHTF 303
Db 247 RHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHNVTSSRIITKHSF 306
QY 304 ATLSFLAETFFLYVGMMDALDIDKWRSDPTGTSIAVSSILMGLVMVGRAAFVPLSFL 363
Db 307 ATLSFVAEIFFLYVGMMDALDIEKWKFFVSDSPGTSVATSGVLLGLILLGRAAFVPLSFI 366

QY 364 SNLAKNQSEKINFNMQVVIWWSGLMRGAVSMALAYNKFTAGHTDVRGNAMITSTITV 423
Db 367 SNLAKKSPNEKISFRQOVIWWSGLMRGAVSMALAYNQFTMSGHTSLRSNAIMITSTIV 426
QY 424 CLFSTVVFGLMTPKPLISVLLP-----HQNATSMLSDDNT--PKSIHIDPLD--QDSFIEP 475
Db 427 VLFSTVVFGLMTPKPLIRLLPHTPHHKESSITITDPTSPKSVTIPLLSAQSEVDI 486
QY 476 SGNHNVPREDTSIRGLTRPTTRTVHYWQFDDSPMRPVFGGRGFVPFVPGSPTERN 531
Db 487 DG-HDIHRPSSIRALLTPTTHTVHLWRKFDAPMRPVFGGRGFVPFVPGSPTERN 541

RESULT 5
US-10-155-535-4
; Sequence 4, Application US/10155535
; Publication No. US20030046729A1
; GENERAL INFORMATION:
; APPLICANT: Blumwald, Eduardo
; APPLICANT: Apse, Maris
; TITLE OF INVENTION: INCREASING SALT TOLERANCE IN PLANTS BY
; TITLE OF INVENTION: EXPRESSION OF VACUOLAR CATION-PROTON ANTIPORTERS
; FILE REFERENCE: 529152000720
; CURRENT APPLICATION NUMBER: US/10/155,535
; CURRENT FILING DATE: 2002-05-24
; PRIOR APPLICATION NUMBER: 09/271,584
; PRIOR FILING DATE: 1999-03-18
; PRIOR APPLICATION NUMBER: 60/078,474
; PRIOR FILING DATE: 1998-03-18
; PRIOR APPLICATION NUMBER: 60/116,111
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 552
; TYPE: PRT
; ORGANISM: Arabidopsis thaliana
US-10-155-535-4

Query Match 69.3%; Score 1910.5; DB 14; Length 552;
Best Local Similarity 69.7%; Pred. No. 4.1e-170;
Matches 377; Conservative 58; Mismatches 97; Indels 9; Gaps 3;
QY 2 LDSLVKLPSTSDSHASVVALNLFVALLCAGIVLGHLEENRWNESITALLIGLGTGV 61
Db 5 LSTMLEKTEALFASDASHASVVMNLFVALLCAGIVLGHLEENRWNESITALLIGSCTGI 64
QY 62 TILLISKGKSHLLVSEDLFFIYLLPPIIFNAGFOVKKQFFRNFTVIMLFGAVGTIIS 121
Db 65 VILLISGGKSHLLVSEDLFFIYLLPPIIFNAGFOVKKQFFRNFTVIMLFGAIGTIS 124
QY 122 CTIISLGVTOFFKKLDIGTDFLDGYLAIGAIFAATDSVCTQLVNLQDETPLLVSIVFG 181
Db 125 FVILISFGAKHLFEKMNIGDITADYLAIGAIFAATDSVCTQLVNLQDETPLLVSIVFG 184
QY 182 VVNDATSVVVFNAIQSFDTLHNEAFAHLLGNFLYFLSTLLGAATGLISAVVIKKLY 241
Db 185 VVNDATSVVFNAINQSFDTLHNEAFAHLLGNFLYFLSTLLGAATGLISAVVIKKLY 244
QY 242 FGRHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHNVTSSRIITKH 301
Db 245 IGRHSTDRVALMMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHYTHNVTSSRIITKH 304
QY 302 TFAATLSFLAETFFLYVGMMDALDIDKWRSDPTGTSIAVSSILMGLVMVGRAAFVPLS 361
Db 305 TFAATLSFLAETFFLYVGMMDALDIEKWKFFVSDSPGTSVATSGVLLGLILLGRAAFVPLS 364
QY 362 FLNLSLAKNQSEKINFNMQVVIWWSGLMRGAVSMALAYNKFTAGHTDVRGNAMITSTI 421
Db 365 FLNLSLAKNQSEKINFNMQVVIWWSGLMRGAVSMALAYNQFTMSGHTSLRSNAIMITSTI 424
QY 422 TVCLFSTVVFGLMTPKPLISVLLP-----HQNATSM--LSDDNTPKSIHIDPLDQDSFIEPS 476

Db 425 TVVLFSTVVGGLLTCKLVKHLQPSKSSQTALQITLRSSFDHPILHEPLLSTQGSYD 484
QY 477 GNHNVPDPDSIRGFLRPTVTHYWRQDSDMRPVFGGRGVFPVPGSPTRNPPDLS 536
Db 485 PECHV-----SFRFWKSPGSAIHYYWRKFDNAVWRIFGGRGVSPVPGSPVQWS 540
QY 537 K 537
Db 541 E 541
RESULT 6
US-10-409-701-23
; Sequence 23, Application US/10409701
; Publication No. US20030221224A1
; GENERAL INFORMATION:
; APPLICANT: Zinselmeier, Chris
; APPLICANT: Helentjaris, Timothy G.
; TITLE OF INVENTION: Enhanced Silk Exsersion Under Stress
; FILE REFERENCE: 1421
; CURRENT APPLICATION NUMBER: US/10/409,701
; CURRENT FILING DATE: 2003-04-08
; PRIOR APPLICATION NUMBER: US 60/370,796
; FILING DATE: 2002-04-08
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 23
; LENGTH: 546
; TYPE: PRT
; ORGANISM: Zea mays
US-10-409-701-23

Query Match 68.5%; Score 1886; DB 14; Length 546;
Best Local Similarity 68.6%; Pred. No. 8e-168;
Matches 363; Conservative 76; Mismatches 84; Indels 6; Gaps 3;
*QY 8 KLPISLSTSDHASVVALNLFVALLCACIVLGHLEENRWNESITALLIGLGTGVTLLIS 67
Db 10 KSGGLSVSDHDAIVSINIFALLCSCIVIGHLEENRWNESITALLVGLTGGVILLVT 69
QY 68 KGKSHLVFSEDFFIYLLPPIIFNAGQVKKQFFNFVTIMLFGAVGTIISL 127
Db 70 NGTNSRLVFSDEDFIYLLPPIIFNAGQVKKQFFNFVTIILFGAIGLISFVILS 129
QY 128 GVTQFFKKLDIGTDLGDLAIGAIFAATSDVCTLOVNLQDETPLLVSIVFGVNDAT 187
Db 130 GAMGLFKLLVGPULGDLAIGAIFAATSDVCTLOVNLQDETPLLVSIVFGVNDAT 189
QY 188 SVVVFNAIQSFDLTHLNEAFAHLLGNFLYLLFLLSTLLGAATGLISAVVIKKLYFGRHST 247
Db 190 SVVLFNAIENLDIDNFDAILNLFVGLKFLYLLFSTLLGATGLISAVVIKKLYFGRHST 249
QY 248 DREVALMMLMAYLSYMLAELFDLSGILTVFFCGIVMSHYTHWNTVTESSRITTKHTFATLS 307
Db 250 DREVSIMLMAYLSYMSIMLDLSGILTVFFCGIVMSHYTHWNTVTESSRITTKHTFATLS 309
QY 308 FLAETFIYLVGMDALDIDKWRVSVDTPGTSIAVSSILMGLVMVGRAAFPVPLSFLNLA 367
Db 310 FIAEIFLVGMDALDIEKWLKASSPKPIALSATILGLVMVGRAAFPVPLSFLNLS 369
QY 368 KKNQSEKINFNMQVIVWWSGLMRGAVSMALAYNKFTRAGHTDVRGNAIMTSTITVCLFS 427
Db 370 KKEARPKISFKQVIVWWSGLMRGAVSMALAYNKFTRAGHTDVRGNAIMTSTITVCLFS 429
QY 428 TVVFGMLTKLISYLLPHQNA--TTMSLSDNTPKSIHPIILDQDGFIEPSGNHNVRPD 485
Db 430 TMVFGMLTKLISYLLPHQNA--TTMSLSDNTPKSIHPIILDQDGFIEPSGNHNVRPD 485
QY 486 SIRGFLTRPTVTHYWRQDSDMRPVFGGRGVFPVPGSPTRNPPD 534
Db 486 NLQFILITAPARSVHRLWRKFDNRMPVFGGRGVFPVPGSPVRSVPE 534

RESULT 8

RESULT 7
US-10-437-963-195062
; Sequence 195062, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 195062
; LENGTH: 525
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)..(525)
; OTHER INFORMATION: unsure at all Xaa locations
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_91047C.1.pep
US-10-437-963-195062

Query Match 63.7%; Score 1756; DB 16; Length 525;
Best Local Similarity 66.7%; Pred. No. 1.2e-155;
Matches 355; Conservative 64; Mismatches 85; Indels 28; Gaps 5;
QY 2 LDSLVSKLPISLSTSDHASVVALNLFVALLCACIVLGHLEENRWNESITALLIGLGTGV 61
Db 5 LGALVLKSGGLVSDYDSIVAINIFVALLCSCIVIGHLEENRWNESITALLVGLTGG 64
QY 62 TILLISKGKSHLVFSEDFFIYLLPPIIFNAGQVKKQFFNFVTIMLFGAVGTIIS 121
Db 65 VILLVSGKSHLVFSEDFFIYLLPPIIFNAGQVKKQFFNFVTIILFGAVGTIIS 124
QY 122 CTIISLGVTPQFKKLDIGTDLGDLAIGAIFAATSDVCTLOVNLQDETPLLVSIVFGEG 181
Db 125 FVIIS-----LAIGAIFSATSDVCTLOVNLQDETPLLVSIVFGEG 164
QY 182 VVNDATSVVVFNAIQSFDLTHLNEAFAHLLGNFLYLLFLLSTLLGAATGLISAVVIKKLY 241
Db 165 VVNDATSVVLFNAIEDIDIANFDSLVLLAFIGNFLYLLFSTLLGAVAGLLSAVVIKKLC 224
QY 242 FGRHSTDREVALMMLMAYLSYMLAELFDLSGILTVFFCGIVMSHYTHWNTVTESSRITTKH 301
Db 225 FAREHSTDREVALMMLMAYLSYMLAELFDLSGILTVFFCGIVMSHYTHWNTVTESSRITTKH 284
QY 302 TFATLSFIAETFIYLVGMDALDIDKWRVSVDTPGTSIAVSSILMGLVMVGRAAFPVPLS 361
Db 285 TFATLSFIAETFIYLVGMDALDIEKWLKASSPKPIALSATILGLVMVGRAAFPVPLS 344
QY 362 FLNLAKKQSEKINFNMQVIVWWSGLMRGAVSMALAYNKFTRAGHTDVRGNAIMTSTI 421
Db 345 FLNLSKKETRPKISFKQVIVWWSGLMRGAVSMALAYNKFTRAGHTDVRGNAIMTSTI 404
QY 422 TVCLFST-VVFGMLTKLISYLLPHQNA--TTMSLSDNTPKSIHPIILDQDGFIEPSGNHN 480
Db 405 IVVLFXTSVFGEFTKPLNLLIPRPDIAADUSS-----QSIIDPLL--GSLIGSDPDVG 458
QY 481 VRPAP-DSIRGFLTRPTVTHYWRQDSDMRPVFGGRGVFPVPGSPTRNPPD 531
Db 459 QPSQPNLQILLTIQTRSVHRVWRKFDNRMPVFGGRGVFPVPGSPVRS 510

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US-10-437-963-149178
; Sequence 149178, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 149178
; LENGTH: 631
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_49537C.1.pep
; US-10-437-963-149178

Query Match      52.3%; Score 1440.5; DB 16; Length 631;
Best Local Similarity 56.2%; Pred. No. 5.9e-126;
Matches 300; Conservative 64; Mismatches 121; Indels 49; Gaps 7;

QY 19 SVVALNFALLCACIVLGHLLLENWMMESITALLIGLGTGVTILLISKSSHLVFS 78
Db 24 TVVSCVFTAVLCVAVLGHLLLENWMMESITALLIGCVGVAIIILLSEKNSRIILFD 83
QY 79 EDLFFTYLPPPIIFNAGFQVKKQFFRNFTVIMLFGAVGTIISCTIISLGVTFFKKLDI 138
Db 84 EQLFYVLPPIIFNAGFQVKKQFFHNFELTMSFGIFGVFISVAIVSTGCYMLFPKGVF 143
QY 139 GTFDLGDYL-----AICAIFAADTSVCTIQVLNQDETPLYLSLVFGGVNDATSVV 190
Db 144 GDUGAVDYLDLILFTTTALGAIFSSDTVCTQVISOETPRYLSLVFGGVNDATSVV 203
QY 191 VFAIQSFDLTHLNHEAAFLHGNFLYLLSTLLGAATGLISAYVILKLYFGRHSTDR 250
Db 204 LFNAIKNLDITQKGGVALKVISDFLLFTSTMLGTIGLSTAYALKALYFGRHSTDR 263
QY 251 VALMMLMAYLSYMLAEFLDLSGLTVFCGIVMSHYTNWNTSSRTTKHTFATLSFLA 310
Db 264 VALMALMAYLSYMLAEFLDLSGLLWVFCGIVMSHYAHNVNTESSRTTTRHIFATLSFIA 323
QY 311 ETFFILYVGMADLIDKWRVSVDTPGTSIAVSSILMGLVMGAAFPPLSFLSN-LAKK 369
Db 324 ETFFILYVGMADLIDKWKTSSETSKTSLGIFGIIISLVLLGRAAFVFPPLSIMSNYSGS 383
QY 370 NQSEKINFMQVVIWVSGLMRGAVSMALAYNKFTRAGHTDVRGNAMITSTITTVCLFSTV 429
Db 384 SEXAPIITFNIQ-----FTFSGVLDPPVHATITSTIIIVVFTTL 422
QY 430 VFGMLTKPLISYLLPHQN--ATT-----SMLSDNTPKSHI-PLLDQDSFIPEPSGNHN 480
Db 423 VFGFLTRPLISAILPHQRQSTTPGTGGGGRSTGNSPKDDFIMPFLSPDEASGSGSF 482
QY 481 VPRPDSIRGFTTRPTRTVHYTWROFDDSFMPFVGGRGFVFPVGGSPTERPPD 534
Db 483 LQAKRSISMLLRPVHTVHYWYRKFDPRMRFPG-----PMERDRGD 526

RESULT 9
US-10-425-114-48759
; Sequence 48759, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
```

```
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 48759
; LENGTH: 338
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3356-014-CL_FLI.pep
; US-10-425-114-48759

Query Match      46.7%; Score 1286.5; DB 15; Length 338;
Best Local Similarity 73.0%; Pred. No. 6.9e-112;
Matches 249; Conservative 41; Mismatches 46; Indels 5; Gaps 3;

QY 176 LVFGEVNDATSVVFNAIQSFDLTHLNHEAAFLHGNFLYLLSTLLGAATGLISAY 235
Db 1 LVFGEVNDATSVVLFNALQNFNLHIDVAVVNLGNFCILFVSSITLLGVFTGLISAY 60
QY 236 VIKKLYFGRHSTDRVALMMLMAYLSYMLAEFLDLSGLTVFCGIVMSHYTNWNTSS 295
Db 61 IIKLYIGHSTDRVALMMLMAYLSYMLAEFLDLSGLTVFCGIVMSHYTNWNTSS 120
QY 296 RITTKHTPATLSFLAETFTFLYVGMADLIDKWRVSVDTPGTSIAVSSILMGLVMGAA 355
Db 121 RVTTKHAFTLSFAETFTFLYVGMADLIDKWEFASDSPGKSIGISSILLGLVVGAA 180
QY 356 FVPPLSFLSNLAKKQSEKINFMQVVIWVSGLMRGAVSMALAYNKFTRAGHTDVRGNAI 415
Db 181 FVPPLSFLSNLTKKSPLEKITFQQIVIWAGLMRGAVSIALAYNKFTRSGHTELHGNAI 240
QY 416 MITSTITTVCLFSTVFCGMLTKPLISYLLPHQNATTSMLSDNTPKSHIPLLD--QDSFI 473
Db 241 MITSTITTVCLFSTVFCGMLTKPLIRLLPACSNAT--SEPPSPKSLHSLPLTSMQSDI 298
QY 474 EPSGNHNVRPDSIRGFTTRPTRTVHYTWROFDDSFMPRPVF 514
Db 299 E-TGSAQIVRPSSILRMLLSKPTHVHYWYRKFDALMRPMF 338
```

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RESULT 10
US-10-425-114-72854
; Sequence 72854, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 72854
; LENGTH: 236
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: UC-OSFLM202093A02_FLI.pep
; US-10-425-114-72854
```

Query Match 30.3%; Score 836; DB 15; Length 236;
 Best Local Similarity 67.9%; Pred. No. 7.4e-70;
 Matches 159; Conservative 29; Mismatches 44; Indels 2; Gaps 1;

QY 298 TTKHTFATLSFLAETFLFYVGMALDIDKWRVSVDTPGTSIAVSSILMGLVMVGRAAFV 357
 Db 1 TTKHTFATLSFLAETFLFYVGMALDIDKWRVSVDTPGTSIAVSSILMGLVMVGRAAFV 60

QY 358 FPLSFLSNLAKNQSEKINFNQVWWSGLMRGAVSMALAYNKFTRAGHTDVRGNAIMI 417
 Db 61 FPLSFLSNLAKNQSEKINFNQVWWSGLMRGAVSMALAYNKFTRAGHTDVRGNAIMI 120

QY 418 TSTITVCLSTVVRGMLTKPLISYLPHQNAATSMISDNTPKSIHPIILDQDSFTPEPSG 477
 Db 121 TSTITVCLSTVVRGMLTKPLISYLPHQNAATSMISDNTPKSIHPIILDQDSFTPEPSG 178

QY 478 NNNVPRPDSIRGFLTRPTTRVHYVWQFDDSPMRPVFGGRGFPVPVPGSGPTERN 531
 Db 179 TTNIVRPSLSRLMLTKPTTRVHYVWQFDDSPMRPVFGGRGFPVPVPGSGPTERN 532

RESULT 11
 US-10-415-378-5
 ; Sequence 5, Application US/10415378
 ; Publication No. US20040014945A1
 ; GENERAL INFORMATION:
 ; APPLICANT: INCYTE CORPORATION; TANG, Y. Tom
 ; APPLICANT: YUE, Henry; NGUYEN, Damiel B.;
 ; APPLICANT: HAFALIA, April J.A.; ELLIOTT, Vicki S.;
 ; APPLICANT: LU, Yan; CHAWLA, Narinder K.;
 ; APPLICANT: YAO, Monique G.; BAUGHN, Mariah R.;
 ; APPLICANT: GANDHI, Ameena R.; DING, Li;
 ; APPLICANT: SANJANWALA, Madhusudan M.; RAMKUMAR, Jayalaxmi;
 ; APPLICANT: ARVIZU, Chandra S.; GIETZEN, Kimberly J.;
 ; APPLICANT: KHAM, Farrah A.; AZIMZAI, Valda;
 ; APPLICANT: THORNTON, Michael B.; LU, Dyrong Aina M.;
 ; APPLICANT: TRIBOULEY, Catherine M.; WARREN, Bridget A.;
 ; APPLICANT: ISON, H. Craig; DAS, Debopriya;
 ; APPLICANT: RAUMANN, Brigitte E.; POLICKY, Jennifer L.;
 ; APPLICANT: KEARNEY, Liam
 ; TITLE OF INVENTION: TRANSPORTERS AND ION CHANNELS
 ; FILE REFERENCE: PI-0270 USN
 ; CURRENT APPLICATION NUMBER: US/10/415,378
 ; CURRENT FILING DATE: 2003-05-07
 ; PRIOR APPLICATION NUMBER: PCT/US01/46055
 ; PRIOR FILING DATE: 2001-10-27
 ; PRIOR APPLICATION NUMBER: US 60/250,790
 ; PRIOR FILING DATE: 2000-12-01
 ; PRIOR APPLICATION NUMBER: US 60/252,232
 ; PRIOR FILING DATE: 2000-11-20
 ; PRIOR APPLICATION NUMBER: US 60/249,661
 ; PRIOR FILING DATE: 2000-11-17
 ; PRIOR APPLICATION NUMBER: US 60/247,673
 ; PRIOR FILING DATE: 2000-11-09
 ; PRIOR APPLICATION NUMBER: US 60/245,904
 ; PRIOR FILING DATE: 2000-11-03
 ; PRIOR APPLICATION NUMBER: US 60/243,989
 ; PRIOR FILING DATE: 2000-10-27
 ; NUMBER OF SEQ ID NOS: 40
 ; SOFTWARE: PERL Program
 ; SEQ ID NO 5
 ; LENGTH: 671
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; OTHER INFORMATION: Incyte ID No. US20040014945A1 7476938CD1
 ; US-10-415-378-5

Query Match 22.1%; Score 608; DB 15; Length 671;
 Best Local Similarity 32.3%; Pred. No. 7.5e-48;
 Matches 171; Conservative 98; Mismatches 191; Indels 70; Gaps 21;

QY 16 DRASVVALNLFVALLCACIVLGHLEENR--WNNESITALLIGLGTGVTILLISKGSSH 73
 Db 145 EQSSGNTIFSLVLAICILVHLLRYRHLFPESVAVVUGILMGAVIKILIEFKLAN 204

QY 74 LL---VSEDLFFIYLLPPIIFNAGQVKKQFRNFVTIMLFGAVGTIISIGVT 130
 Db 205 WKEEEMFRNMPFLLLPPIIFESGYSLHKNFQNGISITLFAVFGTASAFVVGGI- 263

QY 131 QPFKLD-IGTDFLGHYLAIGAIFATDSVCTILOVNO--DETPLLISLVFGEVGVNDATS 188
 Db 264 YFLGQADVLSKLNMTDSFAFGLSISAVDFVATIAFNALHVDVFLNMLVFGESILNDAS 323

QY 189 VVVFNAIQSDFDLTHLN-----HEAFAHLGNFLYLLSTLLGAATGLISAVVIKKLYF 242
 Db 324 IVLTNTAEG--LTRKNMSDVSGWQFLOALDFLKMFGSAALGTUTGLISALVLXIDL 381

QY 243 GRHSTDREVALMMLMAYLSYMLAELFDLSGILTVFCGIVMGSHTWNTVTESSRIITKHT 302
 Db 382 -RKTPSLEFGMMIIFAYLPYGLAEGISLSGIMAILFSGIVMGSHTWNTVTESSRIITKHT 440

QY 303 FATLSFLAETFLFYVGMALDIDKWRVSVDTPGTSIAVSSILMGLVMV--GRAAFVPEL 360
 Db 441 LRTVAPLCETCVFAFLGL-----SIFSPF-HKFEISFVICVLVLFGRVNIFFL 490

QY 361 SFLSNLAKNQSEKINFNQVWWSGLMRGAVSMALAYNKFTRAGHTD---VRGNAIMI 417
 Db 491 SYLLNFR---DEKITPKMFMWFSGL-RGAIPALS------HLDLEPMKRLQIG 539

QY 418 TSTITVCLSTVVRGMLTKPLISYL-----LPHQNAATSMISD---DNTPKSIHPIIL 467
 Db 540 TTTIVIVLFTLLLGSGTMRPLRLMDIEDAKAHRNKKDVNLKTEKMGNTVESEHLSL 599

QY 468 DQDSFIEFSGHNVRPDISIRGFLTRPTTRVHYVWQFDDSPMRPVFGGR 517
 Db 600 TEEY-----EAHYIRQD-LKGFV-----W--LDAKYLNPFPTFR 632

RESULT 12
 US-10-297-022-7
 ; Sequence 7, Application US/10297022
 ; Publication No. US20030216310A1
 ; GENERAL INFORMATION:
 ; APPLICANT: INCYTE GENOMICS, INC.
 ; APPLICANT: THORNTON, Michael
 ; APPLICANT: WALIA, Narinder K.
 ; APPLICANT: YUE, Henry
 ; APPLICANT: NGUYEN, Damiel B.
 ; APPLICANT: LAL, Preeti
 ; APPLICANT: GANDHI, Ameena R.
 ; APPLICANT: TRIBOULEY, Catherine M.
 ; APPLICANT: YAO, Monique G.
 ; APPLICANT: RAMKUMAR, Jayalaxmi
 ; APPLICANT: AU-YOUNG, Janice
 ; APPLICANT: LU, Yan
 ; APPLICANT: TANG, Y. Tom
 ; APPLICANT: AZIMZAI, Valda
 ; APPLICANT: BRUNS, Christopher M.
 ; APPLICANT: GRIFFIN, Jennifer A.
 ; APPLICANT: YANG, Junming
 ; APPLICANT: BAUGHN, Mariah R.
 ; APPLICANT: SANJANWALA, Madhu S.
 ; APPLICANT: RAUMANN, Brigitte E.
 ; APPLICANT: LEE, Ernestine A.
 ; APPLICANT: HAFALIA, April
 ; APPLICANT: GREENE, Barrie D.
 ; APPLICANT: KEARNEY, Liam
 ; APPLICANT: ELLIOTT, Vicki S.
 ; APPLICANT: SEILHAMER, Jeffrey J.
 ; APPLICANT: POLICKY, Jennifer L.
 ; APPLICANT: BOROWSKY, Mark L.
 ; APPLICANT: BURFORD, Neil

```

; APPLICANT: DING, Li
; APPLICANT: LU, Dying Aina M.
; APPLICANT: HILLMAN, Jennifer L.
; TITLE OF INVENTION: TRANSPORTERS AND ION CHANNELS
; FILE REFERENCE: PI-0109 PCT
; CURRENT APPLICATION NUMBER: US/10/297,022
; PRIOR FILING DATE: 2002-11-25
; PRIOR APPLICATION NUMBER: 60/208,424; 60/209,001; 60/210,588; 60/212,335; 60/213,747;
; PRIOR FILING DATE: 2000-05-26; 2000-06-01; 2000-06-08; 2000-06-16; 2000-06-22; 2000-06-22
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: PERL Program
; SEQ ID NO 7
; LENGTH: 673
; TYPE: PRT
; ORGANISM: Homo sapiens
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20030216310A1 7475617CD1
US-10-297-022-7

Query Match      21.9%; Score 604; DB 14; Length 673;
Best Local Similarity 30.0%; Pred. No. 1.8e-47;
Matches 178; Conservative 102; Mismatches 189; Indels 124; Gaps 20;

QY 21 VALNLFVALLCACIVLGHLEEN--RWNNESITALLIGLGTGV-----61
Db 19 VSLTIFILLTTLTIWLFKRRVRFLHETGLMIYGLIVGLRYGTPATSGRDKSL 78
QY 62 -----TILL-----ISGKSSH-----LVFSEDLFFIYLLPI 90
Db 79 CTQEDRAFSTLLVNSGKFFEYTLKGEISPGKINSQEONMLRKVTFDPEVFNILLPI 138
QY 91 IFNAGQVKKKOFFRNFVIMLPGAVGTIISCTIIS--LGVTFPKKLD--IGTFDLGD 145
Db 139 IFHAGYSLKRHRHFRNLGSLAYAFITAVSCFIIGNLMYGVVVKMLGQSLDKFYTD 198
QY 146 YLAIGAIFRATSVCTQLVNODETFL-LYSLVFGGWNDAVTSVVVNAIQSFDTLHN 204
Db 199 CLFFGAILISATDPTVTLAIFNELHADVDYALLFGESVLNDAVAIVLSSIVAYQAGLN 258
QY 205 HE-----AAPHILGNFLYLFLSLTLGAATGLISAVYIK--KLYFGHSTDREVALMGLM 257
Db 259 THAFDAARAFKSVGIFLGFSGFTMGAVTGVTALVTKTKLHC---FPLLETALFFLM 315
QY 258 AYLUSYMLAEFLDSLGLTVFPGVIGVSHYTHWNTESRTTKHTFATLSFLAETRIELY 317
Db 316 SWSTFLLAECGFTGVVAVLFCGITOAHYTYNNLSVESRRTKQLEFVLHFLAENFIYSY 375
QY 318 VGMDALDIDKWSRVSDFPGTSIAVSSITLMG---LVMVGRAAFVFPPLSFLSNLAKKNQSEK 374
Db 376 MGLALFTFQK-----HVSFPIIGAFAVFLGRAAHYPLSFFLNLGRH--K 422
QY 375 INFNMQVVIWWSGLMRGAVSMALAYNKETFRAGHTDVRGNAMITSTTVCLFSTVFGML 434
Db 423 IGWNFQHMFMFSGL-RGAMAFALAIR-----DTASYARQMMFTTILLIVFTVWIIGGG 475
QY 435 TKPLISVLLPHONATTSMLSDNTPKSIH-----IPLLDSDSFIPESGNHNV 481
Db 476 TTEMLSLW-----NTRVGVEEPESEDEHWHQYFRVGVDPDQDPNNDSFQVQLQGD---528
QY 482 PRDPSIRGFLTR-PTRTVHYVYWRQDFDSFMRFVFGGRGVFVFGSPPTERNPP 533
Db 529 -GPDARSAGNRTKQESAMIFRLWYSFDFHNYLKFIL-----THSGPP 567

RESULT 13
US-10-262-511-134
; Sequence 134, Application US/10262511
; Publication No. US20040038223A1
; GENERAL INFORMATION:
; APPLICANT: Smithson, Glennda
; APPLICANT: Millet, Isabelle
; APPLICANT: Peyman, John A.
```

```

; APPLICANT: Kekuda, Ramesh
; APPLICANT: Ju, Jingfang
; APPLICANT: Li, Li
; APPLICANT: Guo, Xiaojia (Sasha)
; APPLICANT: Patturajan, Meera
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Edinger, Shlomit R.
; APPLICANT: Ellerman, Karen
; APPLICANT: Malyankar, Uriel M.
; APPLICANT: Ort, Tatiana
; APPLICANT: Gorman, Linda
; APPLICANT: Zethusen, Bryan D.
; APPLICANT: Anderson, David W.
; APPLICANT: Zhong, Mei
; APPLICANT: Catterton, Elina
; APPLICANT: Ji, Weizhen
; APPLICANT: Miller, Charles E.
; APPLICANT: Rastelli, Luca
; APPLICANT: Stone, David J.
; APPLICANT: Pena, Carol E. A.
; APPLICANT: Shenoy, Suresh G.
; APPLICANT: Shimkets, Richard A.
; APPLICANT: Rothenberg, Mark E.
; APPLICANT: Leach, Martin D.
; APPLICANT: Agee, Michele L.
; APPLICANT: Berghs, Constance
; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
; FILE REFERENCE: 21402-462C
; CURRENT APPLICATION NUMBER: US/10/262,511
; CURRENT FILING DATE: 2003-05-28
; PRIOR APPLICATION NUMBER: 60/326,483
; PRIOR FILING DATE: 2001-10-02
; PRIOR APPLICATION NUMBER: 60/373,815
; PRIOR FILING DATE: 2002-04-19
; PRIOR APPLICATION NUMBER: 60/327,917
; PRIOR FILING DATE: 2001-10-09
; PRIOR APPLICATION NUMBER: 60/381,642
; PRIOR FILING DATE: 2002-05-17
; PRIOR APPLICATION NUMBER: 60/328,029
; PRIOR FILING DATE: 2002-10-09
; PRIOR APPLICATION NUMBER: 60/381,038
; PRIOR FILING DATE: 2002-05-16
; PRIOR APPLICATION NUMBER: 60/328,056
; PRIOR FILING DATE: 2001-10-09
; PRIOR APPLICATION NUMBER: 60/373,260
; PRIOR FILING DATE: 2002-04-17
; PRIOR APPLICATION NUMBER: 60/373,826
; PRIOR FILING DATE: 2002-04-19
; PRIOR APPLICATION NUMBER: 60/327,435
; PRIOR FILING DATE: 2001-10-05
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 439
; SOFTWARE: CuraseqList version 0.1
; SEQ ID NO 134
; LENGTH: 588
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-262-511-134

Query Match      21.6%; Score 595.5; DB 15; Length 588;
Best Local Similarity 31.8%; Pred. No. 9.3e-47;
Matches 171; Conservative 99; Mismatches 190; Indels 77; Gaps 22;

QY 16 DHASVVALNLFVALLCACIVLGHLEENR--WNNESTALLIGLGTGVTILLISKGSSH 73
Db 55 EQSGMTIFFSLLVLAICIIIVHLLIRVLFHFLPSVAVVSLGILMGAVIKIIEFKLAN 114
QY 74 LL---VFSEDLFFIYLLPPIFNAGFQVKKQ-----PFRNFTIMLFGAVGTIISCT 123
Db 115 WKBEEMFRNMFLLPPIIFESGYSILHKVRLRHTLGNFQNTIGTSITLFAVGTALSAF 174
QY 124 IISGVTFQFKLD-IGTFDLGDYLAICAFPAADTSVCTLOVLNQ-DETPLLYSLVFGEG 181
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Db 175 VVGGGI-YFGQADVISKLNMTDSFAFGSLISAVDPVATIAFNALHVDVPLNMLVFGES 233
QY 182 VVNDATSVVFNIAQISFDTHLN-----HEAAHLLGNFLYLLSTLLGAATGLISAY 235
Db 234 ILNDVSVIVLNTAEG--LTKNMSDVSGWQTFLOALDYFLKMFSGAALGLTGLISAL 291
QY 236 VIKKLYFGHSTDEVALMMLAYLSYMLAEFLDLSGILTVFPCGIVMGHYTHWNTSS 295
Db 292 VLKHIDL-RKTSLEFGMMILFAYLPYGLAGISLJSGIMAILFSGIVMGHYTHNLSPVT 350
QY 296 RITTKHTFATLSFLAETFIYLVGMDALDIDKWRVSVDTPGTSIAVSSILMGLVMV--GR 353
Db 351 QILMQOTLRTVAFCTCCTVAFGL-----SIFSEP-HKPEISFVIVCIVIVLFR 400
QY 354 AAFVPLSFLSNLAKKQSEKFNFNQVIVWSGLMRGAVSMALAYNKFTTRAGHTD---V 410
Db 401 AVNIPLSYLLNFR---DHKTPKMMFLMWFSGL-RGAIPVALSL-----HLDLEPM 449
QY 411 RGNAMITSTIVCLFSTVFGMLTKPLISYL-----LPHQNTATSMLSL-----DNTPK 460
Db 450 EKRQLIGTTIVIVFTILLGGSTWPLRLMDIEDAKAHRENKDVNLKTKRMGNTVE 509
QY 461 SHIFLLQDQSFIEPSGNHNVPRPDSIRGFLRPTRTVHYVWRQDDSPMRVPVFGOR 517
Db 510 SEHLSLSETEEEY---EAHYIRQD-LKGFV-----W-LDAKYLNPFFTR 549

RESULT 14

US-10-072-012-654
; Sequence 654, Application US/10072012
; Publication No. US20040033493A1
; GENERAL INFORMATION:
; APPLICANT: Tchernev, Velizar
; APPLICANT: Spytek, Kimberly
; APPLICANT: Zethusen, Bryan
; APPLICANT: Patturajan, Meera
; APPLICANT: Shimkets, Richard
; APPLICANT: Li, Li
; APPLICANT: Gangolli, Esha
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Anderson, David W.
; APPLICANT: Rastelli, Luca
; APPLICANT: Miller, Charles E.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Taupier Jr, Raymond J.
; APPLICANT: Gusev, Vladimir Y.
; APPLICANT: Wolenc, Steven D.
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Gross, William M.
; APPLICANT: Alsobrook II, John P.
; APPLICANT: Lepley, Denise M.
; APPLICANT: Rieger, Daniel K.
; APPLICANT: Burgess, Catherine E.
; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
; FILE REFERENCE: 21402-258
; CURRENT APPLICATION NUMBER: US/10/072,012
; PRIOR FILING DATE: 2002-01-31
; PRIOR APPLICATION NUMBER: 60/265,102
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: 60/265,514
; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/265,517
; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/265,412
; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/265,395
; PRIOR FILING DATE: 2001-01-31
; PRIOR APPLICATION NUMBER: 60/266,406
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 60/266,767
; PRIOR FILING DATE: 2001-02-05

; PRIOR APPLICATION NUMBER: 60/267,057
; PRIOR FILING DATE: 2001-02-07
; PRIOR APPLICATION NUMBER: 60/266,975
; PRIOR FILING DATE: 2001-02-07
; PRIOR APPLICATION NUMBER: 60/267,459
; PRIOR FILING DATE: 2001-02-08
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1391
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 654
; LENGTH: 725
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-072-012-654

Query Match 21.5%; Score 593.5; DB 15; Length 725;
Best Local Similarity 29.7%; Pred. No. 1.9e-46;
Matches 182; Conservative 103; Mismatches 197; Indels 131; Gaps 22;

QY 7 SKLPSLSTSDHA-----SVVALNLFVALLCACIVLGHLEEN--RWMNESITALLIGL 58
Db 52 SAMEELATEKEAEESHRODSVSLLTILLTILTLILFKHRRVRFLEHETGLMIYGLI 111
QY 59 TGV-----TILL-----ISKXSSH----- 74
Db 112 VGVILRYGTPATSGRDKSLCTQEDRAFSTLIVNVSGKFFEYTLKGEISPGKINSVEQND 171
QY 75 ---LVFSEDLFFIYLLPPIIFNAGFOVKKQFFNFVIMLFGAVGIIISCTIIS---L 127
Db 172 MRKVTDFDEFFNILLPPIIFHAGYSILKHHFFNGLSILAYAFELGAVSCFIIGNLMY 231
QY 128 GVTQFFKKLD--IGTFDLGDYLAIGAIPAADTSVCTLOVLNQDETPL-LYSLVFCEGVN 184
Db 232 GWKLMKIMGQLSDKFYYTDCLEFGAIIISATDPTVLAIFNELHADVDLYALLFGESVLN 291
QY 185 DATSVVFNIAQISFDTHLNHE-----AAHLLGNFLYLLSTLLGAATGLISAYVIK- 238
Db 292 DAVAIVLSSSIYVQYQAGLNTAFDAFAFFKSVGIFLGIFSGFTMGAVTG-VNANVTKF 350
QY 239 -KLYFGRHSTDREVALMMLAYLSYMLAEFLDLSGILTVFPCGIVMGHYTHWNTSSRI 297
Db 351 TKLHC---FPLETALFELMSWSTFLAECGFTGVAVLFCGITQAHYTYNNLSVESRS 407
QY 298 TTKHTFATLSFLAETFIYLVGMDALDIDKWRVSVDTPGTSIAVSSILMG---LVMVGRA 354
Db 408 RTKQLFEVLHFLAENFISYMGALFTFQK-----HVFSPFIIGAFVAIFLGRA 457
QY 355 AFVPLSFLSNLAKKQSEKFNFNQVIVWSGLMRGAVSMALAYNKFTTRAGHTDVRGNA 414
Db 458 AHYPLSFFLNLGRH--KIGWNFQHMMPFSGL-RGAMAFALAIR-----DTASYARQ 507
QY 415 IMITSTIVCLFSTVFGMLTKPLISYLLPHQNTATSMLSDDNTPKSIH----- 463
Db 508 MMFTTILLIVFFTWIIGGTTPLMSWL---NIRVGVEBSESDQNEHHQYFRVGVDP 563
QY 464 --IPLLDQDQSFIEPSGNHNVPRPDSIRGFLR-PTRTVHYVWRQDDSPMRVPVFGOR 520
Db 564 DQDPPPNNDQFVQLQD---GPDARGNRTKQESAMIFRLWYFSDHLYLKPL- 613
QY 521 PFVPGSPTERNPP 533
Db 614 -----THSGPP 619

RESULT 15

US-10-072-012-246
; Sequence 246, Application US/10072012
; Publication No. US20040033493A1
; GENERAL INFORMATION:
; APPLICANT: Tchernev, Velizar
; APPLICANT: Spytek, Kimberly
; APPLICANT: Zethusen, Bryan
; APPLICANT: Patturajan, Meera

259 THAFDAAFKSVGIFLGIFSGFTMGAVTGVVVALISFLQNAVTKFKLHCFPLETA 318
253 LMMIMAYLSYMLAEFLDLGILTVFCGIVMSHYTNHNTVTESSRITTKHTPATLSFLAET 312
319 LFFLMWSSTFLAEACGFTGVAVLFCGITHYNNLSVESRSRTKQLPEVLHFLAEN 378
313 FIFLYVGMALDIDKMRVSVDTPGTSIATVSILMG---LVMVGRAAFVPLSELNLAKK 369
379 FIFSYMGLALFTFOK-----HVFSPFIITGAFAVPLGRAAHYPLUSFFNLGRR 428
370 NOSEKINFMQVVIWWSGLMEGAVSMALAYNKFTAGHTDVRGNALMTSTITVCLFSTV 429
429 H---KICWNFQHMWMSGL-RGAWAFALAIR-----DTASYARQMFTTILLIVFFTW 478
430 VFGMLTKPLISYLLPHQWATTSMLSDNTPKSIHPLLDQDSFIEPSGNHNVRPDSIRG 489
479 IIGGTTPLMSWL-----NIRLDGDSARG 503
490 FLTR-PTRTVHYWRFQDSDPMRPFVGGRGVFPVFGSFTERNPP 533
504 NRTQESAWIFRLWYFDHNYLKPIL-----THSGPP 535

Search completed: October 26, 2004, 17:16:20
Job time : 132 secs

APPLICANT: Shimkets, Richard
APPLICANT: Li, Li
APPLICANT: Gangolli, Esha
APPLICANT: Padigar, Muraliadhara
APPLICANT: Anderson, David W.
APPLICANT: Rastelli, Luca
APPLICANT: Miller, Charles E.
APPLICANT: Gerlach, Valerie
APPLICANT: Taupier Jr, Raymond J.
APPLICANT: Gusev, Vladimir Y.
APPLICANT: Coleman, Steven D.
APPLICANT: Wolenc, Adam R.
APPLICANT: Pena, Carol E. A
APPLICANT: Furtak, Katarzyna
APPLICANT: Grosse, William M.
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
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PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 246
LENGTH: 641
TYPE: PRT
ORGANISM: Homo sapiens
US-10-072-012-246
Query Match 21.4%; Score 590; DB 15; Length 641;
Best Local Similarity 28.9%; Pred. No. 3.5e-46;
Matches 169; Conservative 99; Mismatches 177; Indels 140; Gaps 17;
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DB 19 VSLTFTILLTLTITLWLFKRRVRLHETGLMIYGLIVGVILRYGTPTATSGRDKSL 78
QY 62 -----TILL-----ISKGSSHL-----LVFSEDLFFIYLLPPI 90
DB 79 CTQEDRAFTLLNVNVSCKFEYTKGELSPGKINSVEQNMDMLRKVTDPPEVFNILLPPI 138
QY 91 IFNAGFOVKKQPRNFVTMLFGAVGTIISCTIIS---LGVTFQFFKLD--IGTFDLGD 145
DB 139 IFHAGYSLKKRHFENLGLSILAYAFGLTAVSCFIIGNLMYGVVWKLKMGQLSDKFYVTD 198
QY 146 YLAIGALFAATDSVCTLOVLNQDTEPL-LYSLVFGGVNDATSVVFNALQSPDLTHLN 204
DB 199 CLFFGAIISATDPVTVLAIFNELHADVDLYALLFGESVINDAVAIVLSSSIYAYQAGLN 258
QY 205 HE-----AAFHLGNFLYLLSTLLGATGLISAYV-----IKKLYFGRHSTDREVA 252

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OM protein - protein search, using sw model

Run on: October 26, 2004, 17:00:52 ; Search time 40 Seconds
(without alignments)

891.977 Million cell updates/sec

Title: US-09-271-584A-2

Perfect score: 2755

Sequence: 1 MLDSLVSKLPSLSTSDHASV.....FVPVPGSPTRNPPDLKSA 538

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

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2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB ID	Description
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2	563	20.4	509	4	US-09-800-729-93
3	471	17.1	832	2	US-08-677-734A-12
4	471	17.1	832	2	US-09-097-053-12
5	467	17.0	831	2	US-08-677-734A-11
6	467	17.0	831	3	US-09-097-053-11
7	462	16.8	834	2	US-08-677-734A-9
8	462	16.8	834	2	US-08-677-734A-10
9	462	16.8	834	3	US-09-097-053-9
10	462	16.8	834	3	US-09-097-053-10
11	420	15.2	822	4	US-09-824-734-3
12	353.5	12.8	370	4	US-09-800-729-215
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14	320	11.6	339	4	US-09-800-729-129
15	263.5	9.6	696	4	US-09-107-532A-4163
16	258	9.4	1146	4	US-09-824-734-2
17	244	8.9	620	4	US-09-352-991A-21110
18	240.5	8.7	544	4	US-09-489-039A-14296
19	215	7.8	683	3	US-09-134-001C-5576
20	207	7.5	554	4	US-09-543-681A-5774
21	200	7.3	562	4	US-09-489-039A-8574
22	195.5	7.1	228	4	US-09-248-796A-20756
23	185.5	6.7	578	4	US-09-489-039A-14097
24	185.5	6.7	684	4	US-09-583-110-5255
25	178	6.5	424	4	US-09-824-734-4
26	178	6.5	514	4	US-09-252-991A-20338
27	165	6.0	431	4	US-09-328-352-4236

ALIGNMENTS

RESULT 1

US-09-800-729-180
; Sequence 180, Application US/09800729
; Patent No. 6605592
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: 32 Human secreted proteins
; FILE REFERENCE: P2044Pl
; CURRENT APPLICATION NUMBER: US/09/800,729
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: PCT/US00/26013
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 60/155,709
; PRIOR FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 217
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 180
; LENGTH: 526
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (37)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (185)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (215)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (216)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (261)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (263)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (311)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (318)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (320)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (510)

28 158.5 5.8 597 4 US-09-252-991A-32657 Sequence 32657, A
29 144 5.2 511 4 US-09-602-787A-668 Sequence 668, App
30 138 5.0 591 4 US-09-543-681A-7047 Sequence 7047, Ap
31 137.5 5.0 800 3 US-09-134-001C-5655 Sequence 5655, Ap
32 134.5 4.9 412 4 US-09-248-796A-20758 Sequence 20758, A
33 134 4.9 485 4 US-09-540-236-2534 Sequence 2534, Ap
34 131 4.8 613 4 US-09-328-352-7991 Sequence 7991, Ap
35 130.5 4.7 477 3 US-09-134-001C-3487 Sequence 3487, Ap
36 129 4.7 412 4 US-10-138-701-59 Sequence 59, Appl
37 126 4.6 408 4 US-09-107-532A-3796 Sequence 3796, Ap
38 121 4.4 617 3 US-09-134-001C-4012 Sequence 4012, Ap
39 118 4.3 434 4 US-09-543-681A-7154 Sequence 7154, Ap
40 117.5 4.3 469 4 US-08-956-171E-5245 Sequence 5245, Ap
41 117.5 4.2 469 4 US-08-781-986A-5245 Sequence 5245, Ap
42 114.5 4.2 453 4 US-09-252-991A-32168 Sequence 32168, A
43 114.5 4.2 651 4 US-09-252-991A-18065 Sequence 18065, A
44 113.5 4.1 304 4 US-09-328-352-6459 Sequence 6459, Ap
45 113.5 4.1 616 4 US-09-540-236-3084 Sequence 3084, Ap

QY 315 FLVGMALDIDKWSVSDTPTGTSIAVSSILMG---LVMVGRAAFVPLSFLSLAKNQ 371
Db 373 FSYMGLALFTQK-----HVFSPFIIGAFVAIFLGRAHIIPLSFFFLNLRH- 421
QY 372 SEKINFMQVVMWSGLMRGAVSMALAYNKFTTRAGHTDVRGNALMITSTITVCLFSTVWF 431
Db 422 --KIGNFMQMMFSGU-GRAMAFALAIR-----DTASVARQMMFTTILLIVFFTWII 472
QY 432 GMLTKPLISYLLPHQNATSMLSDDNTPKSIHPLLDQDSF 472
Db 473 GGGTTPMLSM-----NIRVGVDPDXPDP-----PXDXSFAF 504

RESULT 3

US-08-677-734A-12
; Sequence 12, Application US/08677734A
; Patent No. 5871919
; GENERAL INFORMATION:
; APPLICANT: Brant, Steven R.
; APPLICANT: Yun, Chris C.H.
; APPLICANT: Donowitz, Mark
; APPLICANT: Tse, Chung-Ming
; TITLE OF INVENTION: Cloning, Tissue Distribution, and
; TITLE OF INVENTION: Functional Analysis Of The Human Na+/H+ Exchanger Isoform,
; TITLE OF INVENTION: NHE3.
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W., Suite 700
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/677,734A
; FILING DATE: 10-JUL-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Fordis, Jean B.
; REGISTRATION NUMBER: 32,984
; REFERENCE/DOCKET NUMBER: 05387.0043-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 832 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide

US-08-677-734A-12

Query Match 17.1%; Score 471; DB 2; Length 832;
Best Local Similarity 29.1%; Pred. No. 1.4e-38;
Matches 148; Conservative 96; Mismatches 197; Indels 68; Gaps 19;
QY 20 VVALNLFVALLCACIV-LGHLLLENWMMNESITALLIGLGTGVTIILLISGKSSHLVLF- 77
Db 56 IIALWLVASLAKIVFHLSH-KVTSVPESALLIVGLVGLGIVL-----AADHLASFT 108
QY 78 -SEDLFFIYLLPIINAGQVKKQFFRNFVIMLFGAVGTIISCTIISLGVTFQFKKL 136
Db 109 LTPVFFIYLLPIIVLDAGYFMPNLFSSILGLIYAVVGTVMNAATGSLSYGVFLSG 168
QY 137 DIGTFDLG--DYALGAIFPATDSVCTQLVINO-DETFLLYSLVFGGVNDATSVVWFN 193

Db 169 IMGELKIGLDFLFLGSLTAADVPAVLAVFEVHNVNEVLIIVFGESLNDATVVLYN 228
QY 194 AIGSEFDLTHLNEHAFLHLLGNFLYLFLSLTLGAAATGLISAYVIKKL-YFGRHSTDREVA 252
Db 229 VFQSVTLGDKVTGVDCKVGIVSFFWVS-LGGLTVGVVFAFLSLVTRFTKHVRVIEPG 287
QY 253 LMMMLAYSLMIAELFDLSGILTVFFCGIVMSHYTHWNTVTESSRIITTKHTFATLSFLAET 312
Db 288 FVFIISYLSYLTSEMLSLSLAITFCGICQCKYKANISEQSATTVRYTMKMLASGAET 347
QY 313 FIFLYVGMALDIDKWSVSDTPTGTSIAVSSILMGLVMVGRAAFVPLSFLSLAKNQ 372
Db 348 IIFMFLGISAVDPLIW-----TWNTAFVRLTL--FVSVFRAIGVVLQWLLNRYRVQL 400
QY 373 EKINFMQVVMWSGLMRGAVSMALAY---NKFTTRAGHTDVRGNALMITSTITVCLFST 428
Db 401 ELID-----QVMSYGLL-RGAVAFALVALLDGNK-----VKEKNLFVSTIIWVFTV 448
QY 429 VVFGMLTKPLISYLLPHQNATSMLSDDNTPK---SIHPLLDQDSFIEPSGNHNVPRPD 485
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QY 486 SIRGLTRPRTVHYH-----WRQFDDSF 510
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RESULT 4

US-09-097-053-12
; Sequence 12, Application US/09097053
; Patent No. 6392025
; GENERAL INFORMATION:
; APPLICANT: Brant, Steven R.
; APPLICANT: Yun, Chris C.H.
; APPLICANT: Donowitz, Mark
; APPLICANT: Tse, Chung-Ming
; TITLE OF INVENTION: Cloning, Tissue Distribution, and
; TITLE OF INVENTION: Functional Analysis Of The Human Na+/H+ Exchanger Isoform,
; TITLE OF INVENTION: NHE3.
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W., Suite 700
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/097,053
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/677,734
; FILING DATE: 10-JUL-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fordis, Jean B.
; REGISTRATION NUMBER: 32,984
; REFERENCE/DOCKET NUMBER: 05387.0043-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 832 amino acids
; TYPE: amino acid
; STRANDEDNESS: single

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;
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-09-097-053-12

Query Match
Best Local Similarity 17.1%; Score 471; DB 3; Length 832;
Matches 148; Conservative 96; Mismatches 197; Indels 68; Gaps 19;

QY 20 VVALNLFVALLCACIV-IGHLEENRWNNESITALLIGLGTGVTTILLISKGKSHLLVF- 77
Db 56 IIALMWLVASLAKIVFHLSH--KVTSVVPESALLIVLGLGVV-----AADHIASFT 108
QY 78 -SEDLFFYLPIIPFIENAGFOVKKQFFRNFTIMLFGAVGTIIISCTIISLGVTOFFPKL 136
Db 109 LTPVFFYLLPPIVLDAGYFMNRLFFGSLIAAVDPVAVLAFEEVHVNEVLIIVFGESLINDAVTVLYN 228
QY 137 DIGTFDLG--DYLAIGAIFAATDSVCTQLVNLQ--DETPLLXSLVFGEGVNDATSVVVFN 193
Db 169 IMGELKIGLLDFLLFGSLIAAVDPVAVLAFEEVHVNEVLIIVFGESLINDAVTVLYN 228
QY 194 AIQSFDTLHNHEAFAHLLGNFLYLLSTLLGAATGLISAYVKKL-YFGRHSTDREVA 252
Db 229 VFQSFVTLDGDKVGTGDCVKRGIVSFFVVS--LGSTLVGVVFAFLLSLVTRFTKHVRVIEPG 287
QY 253 LMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHVTHWNTVTESSRIITKHTFATLSFLAET 312
Db 288 FVFIISVLSYLTSEMLSLSAILAITFCGICCKVKVKNISEQSATTVRYTWMKLASGAE 347
QY 313 FIFLYVGMALDIDKWRVSVDTPGTSIAVSSILMGLVMVGRAAAFVPLSFLSNLAKKNQS 372
Db 348 IIFMFLGISAVDPLIW-----TWNTAFVLTLL--FVSVFAIGVVLQTLNRYRMVQL 400
QY 373 EKINFMQVVIWWSGLMRGAVSMALAY-----NKETRAHGTVDVRGNAMITSTITVCLFST 428
Db 401 ELID---QVVMYSGGL-RGAVAFALVALLDGNK-----VKEKNLFVSTIIIVFEFTV 448
QY 429 VFGMLTKPLISYLLPHONATTSMLSDNTPK---SIHPIILDQDSFIEPSGNHNVPRPD 485
Db 449 IFQGLTIKPLVQMLKVR-----SHREPKNEKLHGRAFD-----HILSAIE 491
QY 486 SIRGETRPRTRVHY-----WROFDDSF 510
Db 492 DISG-----QIGHNYLRDKWNSFDRKFLSKV 515

RESULT 5
US-08-677-734A-11
; Sequence 11, Application US/08677734A
; Patent No. 5871919
; GENERAL INFORMATION:
; APPLICANT: Brant, Steven R.
; APPLICANT: Yun, Chris C.H.
; APPLICANT: Donowitz, Mark
; APPLICANT: Tse, Chung-Ming
; TITLE OF INVENTION: Cloning, Tissue Distribution, and
; TITLE OF INVENTION: Functional Analysis Of The Human Na+/H+ Exchanger Isoform,
; TITLE OF INVENTION: NHE3.
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W., Suite 700
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/677,734A

;
; FILING DATE: 10-JUL-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Fordis, Jean B.
; REGISTRATION NUMBER: 32,984
; REFERENCE/DOCKET NUMBER: 05387.0043-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 831 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-677-734A-11

Query Match
Best Local Similarity 17.0%; Score 467; DB 2; Length 831;
Matches 144; Conservative 99; Mismatches 205; Indels 60; Gaps 18;

QY 20 VVALNLFVALLCACIV-IGHLEENRWNNESITALLIGLGTGVTTILLISKGKSHLLVF- 77
Db 54 IIALMWLVASLAKIVFHLSH--KVTSVVPESALLIVLGLGVV-----WAADHIASFT 106
QY 78 -SEDLFFYLPIIPFIENAGFOVKKQFFRNFTIMLFGAVGTIIISCTIISLGVTOFFPKL 136
Db 107 LTPVFFYLLPPIVLDAGYFMNRLFFGSLIAAVDPVAVLAFEEVHVNEVLIIVFGESLINDAVTVLYN 166
QY 137 DIGTFDLG--DYLAIGAIFAATDSVCTQLVNLQ--DETPLLXSLVFGEGVNDATSVVVFN 193
Db 167 IMGELKIGLLDFLLFGSLIAAVDPVAVLAFEEVHVNEVLIIVFGESLINDAVTVLYN 226
QY 194 AIQSFDTLHNHEAFAHLLGNFLYLLSTLLGAATGLISAYVKKL-YFGRHSTDREVA 252
Db 227 VFBSFVTLDGAVTGVDCVKRGIVSFFVVS--LGSTLVGVVFAFLLSLVTRFTKHVRVIEPG 285
QY 253 LMLMAYLSYMLAEFLDLSGLITVFFCGIVMSHVTHWNTVTESSRIITKHTFATLSFLAET 312
Db 286 FVFIISVLSYLTSEMLSLSAILAITFCGICCKVKVKNISEQSATTVRYTWMKLASGAE 345
QY 313 FIFLYVGMALDIDKWRVSVDTPGTSIAVSSILMGLVMVGRAAAFVPLSFLSNLAKKNQS 372
Db 346 IIFMFLGISAVDPLIW-----TWNTAFVLTLL--FISVFAIGVVLQTLNRYRMVQL 398
QY 373 EKINFMQVVIWWSGLMRGAVSMALAYNKETRAHGTVDVRGNAMITSTITVCLFSTVVF 432
Db 399 ETID---QVVMYSGGL-RGAVAYALV-----VLDDEKVKVKNLFVSTIIIVFEFTVIFQ 450
QY 433 MLTKPLISYLLPHONATTSMLSDNTPK---SIHPIILDQDSFIEPSGNHNVPRPD 489
Db 451 LTIKPLVQMLKVR-----SEOREPKNEKLHGRAFD-----HILSAIEDISG 493
QY 490 FLTRPRTRVHY-----WROFDDSFMPV 513
Db 494 -----QIGHNYLRDKWNSFDRKFLSKV 515

RESULT 6
US-09-097-053-11
; Sequence 11, Application US/09097053
; Patent No. 6392025
; GENERAL INFORMATION:
; APPLICANT: Brant, Steven R.
; APPLICANT: Yun, Chris C.H.
; APPLICANT: Donowitz, Mark
; APPLICANT: Tse, Chung-Ming
; TITLE OF INVENTION: Cloning, Tissue Distribution, and
; TITLE OF INVENTION: Functional Analysis Of The Human Na+/H+ Exchanger Isoform,
; TITLE OF INVENTION: NHE3.
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
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494 -----QIGHNYLRDKWSNFDKFKLSKV 515

Db

RESULT 7

US-08-677-734A-9

; Sequence 9, Application US/08677734A

; Patent No. 5871919

; GENERAL INFORMATION:

; APPLICANT: Brant, Steven R.

; APPLICANT: Yun, Chris C.H.

; APPLICANT: Donowitz, Mark

; APPLICANT: Tse, Chung-Ming

; TITLE OF INVENTION: Cloning, Tissue Distribution, and

; TITLE OF INVENTION: Functional Analysis Of The Human Na+/H+ Exchanger Isoform,

; TITLE OF INVENTION: NHE3.

; NUMBER OF SEQUENCES: 12

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &

; ADDRESSEE: Dunner

; STREET: 1300 I Street, N.W., Suite 700

; CITY: Washington

; STATE: D.C.

; COUNTRY: USA

; ZIP: 20005-3315

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/677,734A

; FILING DATE: 10-JUL-1996

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: Fordis, Jean B.

; REGISTRATION NUMBER: 32,984

; REFERENCE/DOCKET NUMBER: 05387.0043-00000

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (202) 408-4000

; TELEFAX: (202) 408-4400

; INFORMATION FOR SEQ ID NO: 9:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 834 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; US-08-677-734A-9

Query Match 16.8%; Score 462; DB 2; Length 834;

Best Local Similarity 28.6%; Pred. No. 1.1e-37;

Matches 146; Conservative 97; Mismatches 203; Indels 64; Gaps 18;

QY 20 VVALNLFVALLCACIVLGHLEENRNWNETIALLIGLGTGTILLISKG---KSSHLLV 76

Db 57 VIALMLVASLAK---IGFHLSHKVTSSVPEALLVLG-----LVLGIVMAADHIAS 107

QY 77 E--SEDLFFIYLLPIIFNAGFOVKKQFFNFVIMLFGAVGTIISCTIISLGVTQFFK 134

Db 108 FTLTPVFFIYLLPIIFNAGFOVKKQFFNFVIMLFGAVGTIISCTIISLGVTQFFK 167

QY 135 KLDIGTFDLG--DYLAIGAIFAATDSVCTQLVNLQ--DETPLLVSIVFGGVNDATSVV 191

Db 168 SGLMGDLQGLLDLFGSLMAAVIDPVAFLAVFEEVHVNEVLFIIVFGESLLNDAVTVL 227

QY 192 FNAIQSFDLTHNHEAAPHLLGNFLYLLSTLLGAATGLISAYVKKL-YFGRHSTDR 250

Db 228 XNVFESFVALGDNVTGDCVKGVFFVVS-LGGTLVGWVFAFLSLVTRFTKHVRIIE 286

QY 251 VALMLMAYLSYMLAELFDLSGLITVFFCGIVMHSYTHWNTVTESSRIITKHTFATLSFLA 310

Db 287 PGFVFIISYLSLTSEMLSLALITFCGICCKYKVNISEQSATTVRYTKMLASSA 346


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; APPLICANT: STEVENSON, BECKY
; TITLE OF INVENTION: PROTEINS AND DNA RELATED TO SALT TOLERANCE IN PLANTS
; FILE REFERENCE: 205644US20
; CURRENT APPLICATION NUMBER: US/09/824,734
; PRIOR FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: US 60/194,648
; PRIOR FILING DATE: 2000-04-04
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3
; LENGTH: 822
; TYPE: PRT
; ORGANISM: Cricetus griseus
US-09-824-734-3

Query Match      15.2%; Score 420; DB 4; Length 822;
Best Local Similarity 25.4%; Pred. No. 2e-33;
Matches 149; Conservative 100; Mismatches 200; Indels 138; Gaps 23;

QY 23 LNLEVALLCACIVGCHLLE-NRWNMSITALLIGLGTGTWILLISKSGSHLLVFSEDL 81
Db 109 ISWILLACLMKIGFIPTISSIVPSSCLLVVGLLVGGLI-----KGVGETPPFLQSDV 164
QY 82 FFIYLLPPIIFNAGFOVKKOFFNFVTIMLFGAVGTI-----ISCTIISLGVTOFF 133
Db 165 FFIYLLPPIILDAGFYPLQFTENLTILFAVVGTLNNAFFLGGLLYAVCLVGGEQ-- 222
QY 134 KKLIDIGTFDLGYLAIGAFAATDSVCTLOVQNDQ-TPLLYSLVFGGVNDATSVVVF 192
Db 223 ----INNIGLLDTLFGSIISAVDPVAVVAFEEIHINELLHLVFGESLNDVTVVLY 278
QY 193 NATQSPDLTHLNEAAHFLG-----NFLYFLLS---TLGATGLISAYVIKKLYFG 243
Db 279 HLPFEF-----ANYDSIGISDIFLGLSLFVVALGVGVGVVGVIAFTSR---FT 327
QY 244 RHSTDRVALMMLMAYLSYLAELFSLGILTVFFCGIVMSHYTHWNVTESSRITTKHTF 303
Db 328 SHRVIEPLFVFLYSYMAYSALFSLGILTVFFCGIVMSHYTHWNVTESSRITTKHTF 387
QY 304 ATLSFLAETIFLYVGMMDALDIDKWSVSDTPGT-----SIYVSSILMGLVMVGRAAVF 358
Db 388 KMWSSVSETLIFIFLG-----VSTVAGSHQNNWTFVISTLL--FCLARVLGVL 434
QY 359 PLFSLNLAKKQSEKINFNMQVIVWWSGLMRGAVSMALAY-----NKPTRAGHTDVRGNA 414
Db 435 VLTWFN--KFRIVKLTPTKQDFIAYGGL-RGAIAFSLGSLYMDKKHFMCD----- 482
QY 415 IMITSTITVCLFSTVVRGMLTKPLISYLLPHONATTSMLSDNTPKSIHITPLDQDSFIE 474
Db 483 LFLTALTITVFFVVGQMTIRFLVDLLAVKKQETKR-----SINEIHTQFLD----- 532
QY 475 PSGNHNVRPDSIRGFLTRPRTVHYWR-----QFDDSFMRPVF----- 514
Db 533 ---HLLTGIEDICGHYG-----HHWKDKLNKFNKYVKKCLLAGERSKEPQLIAFYH 582
QY 515 -----GGRGFVFFV-----PGS-PTERNPPDLK 537
Db 583 KMEKQAIELVESGGMKTFPSAVSTVSMQNIHPKMSASERILPALSK 629
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RESULT 12

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US-09-800-729-215
; Sequence 215, Application US/09800729
; Patent No. 6605592
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: 32 Human secreted proteins
; FILE REFERENCE: P2044P1
; CURRENT APPLICATION NUMBER: US/09/800,729
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: PCT/US00/26013
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 60/155,709
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; PRIOR FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 217
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 215
; LENGTH: 370
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-800-729-215

Query Match      12.8%; Score 353.5; DB 4; Length 370;
Best Local Similarity 30.8%; Pred. No. 3.3e-27;
Matches 97; Conservative 57; Mismatches 104; Indels 57; Gaps 12;

QY 225 LGAATGLISAYVIK--KLYFGRHSTDRVALMMLMAYLSYLAELFSLGILTVFFCGIV 282
Db 1 MGAVTGVVTVLTKTKLHC---PPLLETALFFLMSWSTFLAACGFTGVVAVLFCGIT 57
QY 283 MSHYTWNVTESSRITTKHTFATLSFLAETIFLYVGMMDALDIDKWSVSDTPGTSTAVS 342
Db 58 QAHYTYNNLSVESRSTKQLFEVLHFLAENPFIYSYMGIALFTFOK-----HVFSP 107
QY 343 SILMG---LVMVGRAAVFPLSFLSLNLAQKQSEKINFNMQVIVWWSGLMRGAVSMALAY 399
Db 108 IFIGAIFALFLGRAAHYPLSFLNLGRRH---KIGWNFOHMMWFSGL-RGAWAFALAI 163
QY 400 NKPTRAGHTDVRGNAMITSTITVCLFSTVVRGMLTKPLISYLLPHONATTSMLSDNT 459
Db 164 R-----DTASYAROMMTTLLIVFFTVIIGGTTPLMSWL-----NIRGVDPDQDPP 213
QY 460 KSHIPLDQDSFIEPSGNHNVRPDSIRGFLTR-PRTVHYWRQFDDSFMRPVFGGRG 518
Db 214 P-----NNDSPQLQSD---GPDARGNRTKQESAWIFRLWYSFDHNYLKBIL---- 258
QY 519 FVFPVPGSPERNPP 533
Db 259 -----THSGPP 264

RESULT 13
US-09-800-729-128
; Sequence 128, Application US/09800729
; Patent No. 6605592
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: 32 Human secreted proteins
; FILE REFERENCE: P2044P1
; CURRENT APPLICATION NUMBER: US/09/800,729
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: PCT/US00/26013
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 60/155,709
; PRIOR FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 217
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 128
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-800-729-128

Query Match      11.8%; Score 320; DB 4; Length 339;
Best Local Similarity 29.9%; Pred. No. 7.2e-24;
Matches 84; Conservative 52; Mismatches 93; Indels 52; Gaps 10;

QY 257 MAYLSYMLAELFSLGILTVFFCGIVMSHYTWNVTESSRITTKHTFATLSFLAETIFIL 316
Db 1 MSWSTFLAELACGFTGVVAVLFCGITQAHYTYNNLSVESRSTKQLFEVLHFLAENPIFS 60
QY 317 YVGMMDALDIDKWSVSDTPGTSTAVSSILMG---LVMVGRAAVFPLSFLSLNLAQKQSE 373
Db 61 YMGIALFTFOK-----HVFSPFIIGAFVAFILGRAAHYPLSFLNLGRRH--- 107
QY 374 KINFNMQVIVWWSGLMRGAVSMALAYNKPTRAGHTDVRGNAMITSTITVCLFSTVVRG 433
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Db 108 KIGWFMQMMFSGL-RGAMAFALAIR-----DTASYARQMMFTTLLIVFFTWIIGG 160
Qy 434 LTKPLISYLLPHQNAATSMLSDDNTPKSIHITPLLDQDSFIEPSGNHNVPRDSTRGFLTR 493
Db 161 GTTPMLSLW-----NIRVGVDPDQDPPP-----NNDSFQVLQGD-----GPDARSAGNRK 205
Qy 494 -PTRTVHYWRFQDSDFMRFVFGGRGFVFPVFGSPTRNPP 533
Db 206 QESAWIFRLWISFDHNYLKPL-----THSGPP 233

RESULT 14
US-09-800-729-129
; Sequence 129, Application US/09800729
; Patent No. 6605592
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: 32 Human secreted proteins
; FILE REFERENCE: P2044P1
; CURRENT APPLICATION NUMBER: US/09/800,729
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: PCT/US00/26013
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 60/155,709
; PRIOR FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 217
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 129
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-800-729-129
Query Match 11.6%; Score 320; DB 4; Length 339;
Best Local Similarity 29.9%; Pred. No. 7.2e-24;
Matches 84; Conservative 52; Mismatches 93; Indels 52; Gaps 10;
Qy 257 MAYLSYMLAEFLDLSGLTVPFCGIVMSHYTHWNTSESRITTKHTFATLSPLASTFIFL 316
Db 1 MSWSTFLAEACGGTGVAVLFCGTQAHYTYNNLSVESRRTKQLFEVLHPLAENFIFS 60
Qy 317 YVGMALDIDKWRVSVDTPGTSIAVSSILMG---LVMVGRAAFVPEPLSFLNLAKKNOSE 373
Db 61 YMGALFTFK-----HVPSPFIIGAFVAIFLGRAAHYVPLSFFNLGRH--- 107
Qy 374 KINFNMQVIVWVGLMAGVAMALAYNKFTAGTDDVRGNAMITSTITVCLFSTVVFQM 433
Db 108 KIGWFMQMMFSGL-RGAMAFALAIR-----DTASYARQMMFTTLLIVFFTWIIGG 160
Qy 434 LTKPLISYLLPHQNAATSMLSDDNTPKSIHITPLLDQDSFIEPSGNHNVPRDSTRGFLTR 493
Db 161 GTTPMLSLW-----NIRVGVDPDQDPPP-----NNDSFQVLQGD-----GPDARSAGNRK 205
Qy 494 -PTRTVHYWRFQDSDFMRFVFGGRGFVFPVFGSPTRNPP 533
Db 206 QESAWIFRLWISFDHNYLKPL-----THSGPP 233

RESULT 15
US-09-107-532A-4163
; Sequence 4163, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts

COUNTRY: USA
ZIP: 02354
COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: PC
OPERATING SYSTEM: <Unknown>
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571
FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007
TELEFAX: (781)893-8277
INFORMATION FOR SEQ ID NO: 4163:
SEQUENCE CHARACTERISTICS:
LENGTH: 696 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ORIGINAL SOURCE:
ORGANISM: Enterococcus faecium
FEATURE:
NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...696
SEQUENCE DESCRIPTION: SEQ ID NO: 4163:
US-09-107-532A-4163

Query Match 9.6%; Score 263.5; DB 4; Length 696;
Best Local Similarity 24.1%; Pred. No. 1.2e-17;
Matches 99; Conservative 96; Mismatches 167; Indels 49; Gaps 17;
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Db 31 IPAPLIQIFLGVGLTGWGQS---IDFEPLFLVMIAPLLFREGEKADISSILKNFGT 87
Qy 110 IMLFCAVCTISCTISLGVTFQFKKLDIGTFDLGDYLAIGAIFAATDSVCTQLVINO 169
Db 88 I-LFLAFGGVI-LTILVGVGATLSFL---LPSVPLAACFAFGAALGPTDAVAVSSLSGRVN 142
Qy 170 TP-LLYSLVFGGVVNDATSVVFNAIQSFDLTHNHEAAFHLLGNFLYL-----FLIST 223
Db 143 IPKAMHILEGEGLLNDASGVTAFA---QFALGAL-----ITGSFSAVNAGMSLVSS 191
Qy 224 LLGAATGLISAVIKLYFGRHSTDEVA-----LMMMLMAYLSYMLAEPLDLSGILT 275
Db 192 IGGALIGFLVWFKOKII---HLIEKASADQVTVGLLIELLPFLAYVLAFAFVSGIIA 248
Qy 276 VFFCGIVM-SHYTHWNTSESRITTKH-TFATLSPLAETFIPLYVGMALDIDKWRVSVD 333
Db 249 AVAAGILOASGRKISVDFDAELSSLSHSTWTIATLNALVFIFLGIELTQV-----FSP 303
Qy 334 TPGTSTIAVSSILMGLVMVGRAAFVPEPLSFLS---NLAKNOKSEKINFNM-QVVIWWSGLM 389
Db 304 VMGDGLYPNGLLAIIVL-ISVMLFVIRFISLSFYVFKDGSKKFKKQLNEILITFGV 362
Qy 390 RGAVSMALAYNKFTAGTDDVRGNAMITSTITVCLFSTVVFQMLTKPLIS 440
Db 363 KGTVSLATIFILPPSINNMMFYQSRLLFLTAGVILV-TLVIGIIVLPMIT 412

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OM nucleic - nucleic search, using sw model

Run on: October 21, 2004, 01:44:47 ; Search time 2252 Seconds

(without alignments)
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Title: US-09-271-584a-1

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Total number of hits satisfying chosen parameters: 6814466

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1617	74.2	1617	9	US-09-938-842A-1239
2	1617	74.2	1617	11	US-09-938-842A-1239
3	1149.4	52.8	2136	14	US-10-155-535-1
4	837.4	38.4	1915	16	US-10-425-114-20609
5	821.8	37.7	1968	16	US-10-424-599-58707
6	797.6	36.6	1620	15	US-10-369-324-38
7	797.6	36.6	1620	17	US-10-607-538-38
8	794.4	36.5	1621	15	US-10-369-324-37
9	794.4	36.5	1621	17	US-10-607-538-37
10	719	33.0	2066	14	US-10-155-535-3
11	682.6	31.3	1638	15	US-10-409-701-22
12	546.2	25.1	1669	17	US-10-437-963-92579
13	468.2	21.5	1014	16	US-10-425-114-21998

14	418	19.2	418	9	US-09-770-423-408	Sequence 408, Appl
15	415.2	19.1	1896	17	US-10-437-963-46695	Sequence 46695, A
16	291.4	13.4	805	16	US-10-425-114-30183	Sequence 30183, A
17	269.2	12.4	612	17	US-10-021-323-8200	Sequence 8200, Ap
18	239	11.0	420	17	US-10-767-701-18258	Sequence 18258, A
19	165.4	7.6	601	17	US-10-767-701-2235	Sequence 2235, Ap
20	165.2	7.6	466	11	US-09-732-627A-3880	Sequence 3880, Ap
21	165.2	7.6	466	17	US-10-767-795-2863	Sequence 2863, Ap
22	161.2	7.4	515	17	US-10-767-701-22357	Sequence 22357, A
23	152.2	7.0	573	17	US-10-021-323-2361	Sequence 2361, Ap
24	149.4	6.9	596	17	US-10-021-323-15135	Sequence 15135, A
25	146.4	6.7	2000	9	US-09-938-842A-3933	Sequence 3933, Ap
26	146.4	6.7	2000	11	US-09-938-842A-3933	Sequence 3933, Ap
27	141.8	6.5	1824	10	US-09-991-936-1870	Sequence 1870, Ap
28	141.8	6.5	1824	10	US-09-991-936-1871	Sequence 1871, Ap
29	141.8	6.5	2080	10	US-09-991-936-1867	Sequence 1867, Ap
30	141.8	6.5	2080	10	US-09-991-936-1869	Sequence 1869, Ap
31	139.8	6.4	859	17	US-10-767-701-7658	Sequence 7658, Ap
32	125	5.7	281	9	US-09-294-093B-2897	Sequence 2897, Ap
33	123.4	5.7	452	17	US-10-767-701-21917	Sequence 21917, A
34	117.2	5.4	581	17	US-10-021-323-2327	Sequence 2327, Ap
35	117	5.4	739	16	US-10-424-599-58708	Sequence 58708, A
36	115.2	5.3	760	17	US-10-437-963-46697	Sequence 46697, A
37	111.8	5.1	3727	16	US-10-415-378-25	Sequence 25, Appl
38	109.2	5.0	409	17	US-10-767-701-7659	Sequence 7659, Ap
39	105.2	4.8	339	17	US-10-767-701-18259	Sequence 18259, A
40	92.4	4.2	1479	15	US-10-060-998-6	Sequence 6, Appli
41	92.4	4.2	1528	15	US-10-060-998-4	Sequence 4, Appli
42	92.4	4.2	1935	14	US-10-217-096-3	Sequence 3, Appli
43	92.4	4.2	1938	15	US-10-060-998-2	Sequence 2, Appli
44	92.4	4.2	2078	15	US-10-060-998-1	Sequence 1, Appli
45	92.4	4.2	2890	16	US-10-332-447-45	Sequence 45, Appl

ALIGNMENTS

RESULT 1
US-09-938-842A-1239
; Sequence 1239, Application US/09938842A
; Patent No. US20020160378A1
; GENERAL INFORMATION:
; APPLICANT: Harper, Jeff
; APPLICANT: Kreps, Joel
; APPLICANT: Wang, Xun
; APPLICANT: Zhu, Tong
; TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
; FILE REFERENCE: SCRIPL300-3
; CURRENT APPLICATION NUMBER: US/09/938,842A
; PRIOR FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: US 60/227,866
; PRIOR FILING DATE: 2000-08-24
; PRIOR APPLICATION NUMBER: US 60/264,647
; PRIOR FILING DATE: 2001-01-16
; PRIOR APPLICATION NUMBER: US 60/300,111
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 5379
; SEQ ID NO 1239
; LENGTH: 1617
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-938-842A-1239

Query Match 74.2%; Score 1617; DB 9; Length 1617;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1617; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 286 ARGTTGGATTCCTAGTGTGGAACCTCGTTATCGACATCTGATCACTGTTG 345
Db 1 ARGTTGGATTCCTAGTGTGGAACCTCGTTATCGACATCTGATCACTGTTG 60
QY 346 GTTGGTGAATCTCTTTGTTGCACTCTTTGTTGTTGTTGTTGTTGTTGTTG 405

Db 61 GTTGGCTGATCTCTTTGGTGGCACTTCTTGTGCTGTATTTCTTTGGTCACTTTTG 120
QY 406 GAAGAGATAGATGAAGAAATCCATCAACCCCTTTGTTGATTTGGCTAGGCACTGGT 465
Db 121 GAAGAGATAGATGAAGAAATCCATCAACCCCTTTGTTGATTTGGCTAGGCACTGGT 180
QY 466 GTTACCAATTTGTTGATTAAGAGAAAGCTCGCATCTTCTCGTCTTTAGTGAAGAT 525
Db 181 GTTACCAATTTGTTGATTAAGAGAAAGCTCGCATCTTCTCGTCTTTAGTGAAGAT 240
QY 526 CTTTCTTCATATATCTTTGGCCACCATTATATCAATGACGGGTTTCAAGTAAAAAAG 585
Db 241 CTTTCTTCATATATCTTTGGCCACCATTATATCAATGACGGGTTTCAAGTAAAAAAG 300
QY 586 AAGCAGTTTTTCCCAATTTGGTGAATATATGCTTTTGGTGTGTTGGGACTATTATT 645
Db 301 AAGCAGTTTTTCCCAATTTGGTGAATATATGCTTTTGGTGTGTTGGGACTATTATT 360
QY 646 TCTTGCACATCATATCTTAGGTGTAACACAGTCTTTAAGAAAGTTGGACATTTGGAACC 705
Db 361 TCTTGCACATCATATCTTAGGTGTAACACAGTCTTTAAGAAAGTTGGACATTTGGAACC 420
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Db 421 TTTGACTTTGGTGATTAATCTTTGCTATTTGGTGGCATTATTTGCTGCAACAGATTCAATAT 480
QY 766 ACATGCAAGTTCTGAATCAAGAGAGACACCTTTGCTTTTACAGTCTTTGTTTGGAGAG 825
Db 481 ACATGCAAGTTCTGAATCAAGAGAGACACCTTTGCTTTTACAGTCTTTGTTTGGAGAG 540
QY 826 GGTGTGTGAATGATGAACCTCAGTTGTGCTTTCAACGGGATTCAGAGCTTTGATCTC 885
Db 541 GGTGTGTGAATGATGAACCTCAGTTGTGCTTTCAACGGGATTCAGAGCTTTGATCTC 600
QY 886 ACTCACCTAAACCAAGAGCTGCTTTTCTATCTTTGGAAGTCTTTGTTTGGTCTTC 945
Db 601 ACTCACCTAAACCAAGAGCTGCTTTTCTATCTTTGGAAGTCTTTGTTTGGTCTTC 660
QY 946 CTAAGTACCTTTGCTGCTGCAACCCGCTGTGATAAGTGGTATTTATCAAGAGCTA 1005
Db 661 CTAAGTACCTTTGCTGCTGCAACCCGCTGTGATAAGTGGTATTTATCAAGAGCTA 720
QY 1006 TACTTTGAAGCACTCAACTGACGAGAGTGTCCCTTATGATCTTATGCGTATCTT 1065
Db 721 TACTTTGAAGCACTCAACTGACGAGAGTGTCCCTTATGATCTTATGCGTATCTT 780
QY 1066 TCTTATATGCTTGTGAGCTTTTTCGACTTTGAGCGGTATCCTCAGTGTGTTTTTCTGCGT 1125
Db 781 TCTTATATGCTTGTGAGCTTTTTCGACTTTGAGCGGTATCCTCAGTGTGTTTTTCTGCGT 840
QY 1126 ATTGTGATGCCATTAACATGACGAGCAATGTAACGGAGAGCTCAAGATTAACACAAG 1185
Db 841 ATTGTGATGCCATTAACATGACGAGCAATGTAACGGAGAGCTCAAGATTAACACAAG 900
QY 1186 CATACCTTTGCAACTTTGTCATTTCTGCGAGACATTTATTTTCTGATGTTGGAATG 1245
Db 901 CATACCTTTGCAACTTTGTCATTTCTGCGAGACATTTATTTTCTGATGTTGGAATG 960
QY 1246 GATGCTTTGCAATTTGACAAGTGGAGATCCGTGAGTGACACACCGGGAACATTCGATCGCA 1305
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Db 1021 GTGAGCTCAATCTTAATGGGTCTGTCTATGTTGGAAGAGAGCGTTCGTTTCCGTTA 1080
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Db 1141 GTTGTGATTTGGTGTCTGGTCTCATGAGAGTGTCTGTATCTATGGCTCTTGCATACAAC 1200
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Db 1201 AAGTTTACAAGGCGGGCACACAGATGTACGGGGAATCAATCATGATCAACGAGTACG 1260
QY 1546 ATAACCTCTCTCTTTTAGCACAGTGGTCTTTGGTATGCTGACCAACCACTCATAGC 1605
Db 1261 ATAACCTCTCTCTTTTAGCACAGTGGTCTTTGGTATGCTGACCAACCACTCATAGC 1320
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Db 1381 TCCATACATATCCCTTTGTTGGACCAAGACTCGTTTCAATGAGCTTTCAGGAAACCAAT 1440
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Db 1441 GTGCTCTGGCTGACAGTATACGTTGGCTTTCTTGACACGGGCCCACTCGAACCGTGCATTAC 1500
QY 1786 TACTGGAGACAAATTTGATGACTCCTTTCATGGGACCCGCTTTTGAGCTCGTGGCTTTGTA 1845
Db 1501 TACTGGAGACAAATTTGATGACTCCTTTCATGGGACCCGCTTTTGAGCTCGTGGCTTTGTA 1560
QY 1846 CCCTTTGTTCCAGTCTTCCAACTGAGAGAAACCTCCTGATCTTAGTAAGGCTTGA 1902
Db 1561 CCCTTTGTTCCAGTCTTCCAACTGAGAGAAACCTCCTGATCTTAGTAAGGCTTGA 1617

RESULT 2
US-09-938-842A-1239
; Sequence 1239, Application US/09938842A
; Publication No. US20040009478A9
; GENERAL INFORMATION:
; APPLICANT: Harper, Jeff
; APPLICANT: Kreps, Joel
; APPLICANT: Wang, Xun
; APPLICANT: Zhu, Tong
; TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
; FILE REFERENCE: SCRIPI300-3
; CURRENT APPLICATION NUMBER: US/09/938,842A
; CURRENT FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: US 60/227,866
; PRIOR FILING DATE: 2000-08-24
; PRIOR APPLICATION NUMBER: US 60/264,647
; PRIOR FILING DATE: 2001-01-16
; PRIOR APPLICATION NUMBER: US 60/300,111
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 5379
; SEQ ID NO 1239
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-09-938-842A-1239

Query Match 74.2%; Score 1617; DB 11; Length 1617;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1617; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 286 ATGTTGGAATCTCTAGTGTGAAATCGCTTCGTTATCGACATCTGATCAAGCTTCTGTG 345
Db 1 ATGTTGGAATCTCTAGTGTGAAATCGCTTCGTTATCGACATCTGATCAAGCTTCTGTG 60
QY 346 GTTGGTTGAATCTCTTTTGTGCACTTCTTTGTGCTTGTATTTCTTGGTCACTTTTG 405
Db 61 GTTGGTTGAATCTCTTTTGTGCACTTCTTTGTGCTTGTATTTCTTGGTCACTTTTG 120
QY 406 GAAGAGATAGATGATGAACGAATCCATCACCGCTTGTGATTTGGGCTAGGCACTGCT 465
Db 121 GAAGAGATAGATGATGAACGAATCCATCACCGCTTGTGATTTGGGCTAGGCACTGCT 180

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QY 466 GTTACCAATTTTGTGTTGATTAGTAAGAAAAAGCTCGCATCTTCTCGTCTTTAGTGAAGAT 525
Db 181 GTTACCAATTTTGTGTTGATTAGTAAGAAAAAGCTCGCATCTTCTCGTCTTTAGTGAAGAT 240
QY 526 CTTTCTTTCATATATCTTTTGGCCACCCCAATATATCAATGACAGGTTTCAAGTAAAAAG 585
Db 241 CTTTCTTTCATATATCTTTTGGCCACCCCAATATATCAATGACAGGTTTCAAGTAAAAAG 300
QY 586 AAGCAGTTTTCGCCCAATTCGTCAGCTATATGCTTTTGGTGTCTGTTGGACATATATT 645
Db 301 AAGCAGTTTTCGCCCAATTCGTCAGCTATATGCTTTTGGTGTCTGTTGGACATATATT 360
QY 646 TCTTGCAATATCTAGGTGTAACACAGTTCTTTAAGAAAGTTGGACATTTGGAACC 705
Db 361 TCTTGCAATATCTAGGTGTAACACAGTTCTTTAAGAAAGTTGGACATTTGGAACC 420
QY 706 TTTGACTGGGTGATATCTTGTCTATTGGTGCCATATTTGTCGAACAGATTCAGTATGT 765
Db 421 TTTGACTGGGTGATATCTTGTCTATTGGTGCCATATTTGTCGAACAGATTCAGTATGT 480
QY 766 AACTGACAGTTCTGAATCAAGACGACACACCTTTGCTTTACAGTCTTGATTCGGAGAG 825
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QY 826 GGTGTTGTGAATGATCAACGCTCAGTTGTGTCTTCAACGCGATTTCAGAGCTTTGATCTC 885
Db 541 GGTGTTGTGAATGATCAACGCTCAGTTGTGTCTTCAACGCGATTTCAGAGCTTTGATCTC 600
QY 886 ACTCACCTAAACACGAGCTGCTTTTCATCTTCTGGAAACCTTCTTGTAATTTGTTTCTC 945
Db 601 ACTCACCTAAACACGAGCTGCTTTTCATCTTCTGGAAACCTTCTTGTAATTTGTTTCTC 660
QY 946 CTAAGTACCTTGTGTTGCTGCAACCGGTCTGTAAGTACGCTATGTTATCAAGAGCTA 1005
Db 661 CTAAGTACCTTGTGTTGCTGCAACCGGTCTGTAAGTACGCTATGTTATCAAGAGCTA 720
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Db 721 TACTTTGGAAGGCACTCAACTGACCGAGAGGTTGCCCTTATGATGCTTATGGGCTATCTT 780
QY 1066 TCTTATATGCTGCTGAGCTTTTTCGACTTGAGCGGTATCTCTACTGTGTTTTTCTGTGGT 1125
Db 781 TCTTATATGCTGCTGAGCTTTTTCGACTTGAGCGGTATCTCTACTGTGTTTTTCTGTGGT 840
QY 1126 ATTGTGATGTCCTATACATGCAATGTAACGAGAGCTCAAGATTAACAACAAG 1185
Db 841 ATTGTGATGTCCTATACATGCAATGTAACGAGAGCTCAAGATTAACAACAAG 900
QY 1186 CATACCTTTGCACTTTGTCAATTTCTTGGAGACATTTATTTTCTGTATGTTGGAATG 1245
Db 901 CATACCTTTGCACTTTGTCAATTTCTTGGAGACATTTATTTTCTGTATGTTGGAATG 960
QY 1246 GATGCTTGGACATTTGCAAGTGGAGATCCGTGAGTGACACACCGGGAACATCGATCGCA 1305
Db 961 GATGCTTGGACATTTGCAAGTGGAGATCCGTGAGTGACACACCGGGAACATCGATCGCA 1020
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Db 1021 GTGAGCTCAATCTTATGCTGCTGCTCATGTTTGGAGAGAGCGTTGCTTTCCGTTA 1080
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QY 1486 AAGTTTACAGGGCCGGGACACAGATGTAACGGGGAATGCAATCATGATACAGTACG 1545
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QY 1546 ATAAGTCTCTCTCTTTTGTAGCACAGTGGTGTGGTATGCTGACCAAAACCACTCATAAAGC 1605
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QY 1726 GTGCTCTGGCTGACAGTATACGTGGCTTCTTGACACGGGCCACTCGAACCGTGCATTAC 1785
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Db 1561 CCCTTTGTTCCAGGTTCTCCAACTGAGAGAAACCTCCTGATCTTAGTAAGGCTTGA 1617

RESULT 3
US-10-155-535-1
; Sequence 1, Application US/10155535
; Publication No. US20030046729A1
; GENERAL INFORMATION:
; APPLICANT: Blumwald, Eduardo
; APPLICANT: Apse, Maris
; TITLE OF INVENTION: INCREASING SALT TOLERANCE IN PLANTS BY
; TITLE OF INVENTION: EXPRESSION OF VACUOLAR CATION-PROTON ANTIPORTERS
; FILE REFERENCE: 529152000720
; CURRENT APPLICATION NUMBER: US/10/155,535
; PRIOR FILING DATE: 2002-05-24
; PRIOR APPLICATION NUMBER: 09/271,584
; PRIOR FILING DATE: 1999-03-18
; PRIOR APPLICATION NUMBER: 60/078,474
; PRIOR FILING DATE: 1998-03-18
; PRIOR APPLICATION NUMBER: 60/116,111
; PRIOR FILING DATE: 1999-01-15
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 2136
; TYPE: DNA
; ORGANISM: Arabidopsis thaliana
US-10-155-535-1

Query Match 52.8%; Score 1149.4; DB 14; Length 2136;
Best Local Similarity 81.5%; Pred. No. 3.3e-274;
Matches 1362; Conservative 0; Mismatches 291; Indels 18; Gaps 2;

QY 272 AGAAGAGATAACAATGTTGGATTCTTAGTGTGAAATCGCTTCGTTATCGACATCTG 331
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Db 413 ATCAGCAATCTGCTGTTCACTTAATCTTTTGTGCTTCTTATGTGCTTATGTCATCA 472
QY 392 TTGGTCATCTTTTGAAGAGATAGATGATCAACGAATCCATCCCGCTTGTGATG 451
Db 473 TTGGCACTTTTGGAGAGATCAATGATCAACGAATCCATCCATCTGTTTATTGATG 532
QY 452 GCTAGGCACTGTTTACCAATTTTGTGATTAAGGAAAGAAAGCTCGCATCTTCTCG 511
Db 533 GCTTGGCACTGTTGCTCATATTTGTTGATTTAGTAGGGAAGAAACACATCTCTTGG 592
QY 512 TCTTTAGTGAAGATCTTTTCTCATATATCTTTTCCCAACCAATATATTCATGAGG 571
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Db 593 TCCTTAGTGAAGATCTCTTCTTATATATCTTTTGCCACCAATAATTCATGACGGGT 652
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Db 653 TTCAAGTAAAAAGAGACAGTTTTTTCGGAATTTTGAACATATATGCTTTTGGGCGCA 712
QY 632 TTGGGACTATATTTCTTGACAAATATCTCTAGGTGTAACACAGTCTCTTTAAGAAAT 691
Db 713 TTGGGACCGTAGTTTCTTGACCAATATATCTCTAGGTGTAATTCAGTCTTTAAGAAAT 772
QY 692 TGGACATTTGAACCTTTGACTTTGGGTGATTATCTTGCTATTTGTTGCGCATATTTGCTGCAA 751
Db 773 TAGACATTTGGACCTTTGACTTTGGCGATTTCTTGCAATCGCGCGCATATTTGCTGCAA 832
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QY 872 AGACCTTTGATCTCACTCACTAAACCAAGAGCTGCTTTTCATCTCTTGGAAACTTCT 931
Db 953 AGATTTTGACTCACCACCTTAACCATGAAGCAGCTTTTCAATTTCTTGGGAACTTT 1012
QY 932 TGTATTTGTTCTCTAAGTACCTTGTGTGCTGCAACCGGTCTGTAAGTCGGTATG 991
Db 1013 TTTATCTGTTCTCTTGAGCACCGGACTTGTGTGTCGCAACTGGTCTGATAAGTCTTATG 1072
QY 992 TTATCAAGAAGCTATCTTTTGAAGGCACTCAACTGACCGAGAGGTGCCCCCTTATGATGC 1051
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QY 1052 TTATGGGCTATCTTTCTTATATGCTTGTGAGCTTTTCGACTTGTGAGCGGTATTCCTCACTG 1111
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QY 1112 TGTATTTCTGTGATTTGTGATGTCCTTATACATGATGACCAATGATCGAGAGCTCAA 1171
Db 1193 TAATTTCTGTGGGATTTGTGATGTCCTCAATTAACCTTGGCAAAATGTCACCGAGAGCTCAA 1252
QY 1172 GAATAACAACAAGACATACCTTTTGCACTTTGTCTATTTCTTGGCGAGACATTTATTTCT 1231
Db 1253 GAATTAACACAGCAAGCTTTGTCTTGTCTTGTCTGCTGAGACTTTATTTTCT 1312
QY 1232 TGTATTTGGAATGGATGCTTGGACATGCAAGTGGAGATTCCTGTGATGACACACCGG 1291
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QY 1532 TGATCAGGAGTACGATAACTGTCTGTCTTTTGTAGCACAGTGGTGTGTTGGTATGCTGACCA 1591
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QY 1592 AACCACTCATAGCTTACCTTATACCGCACACGACGCG-----CACACAGCAGATGT 1642
Db 1673 AACCACTGATTAGACTTAATGACCAACACCAAAAGCGACACCAAGCAGTACCAAGAGTATGT 1732

QY 1643 TATCTGATGACAAACCCCAAAATCCATATCCATTCCTTTGTTGG-----ACCAAG 1693
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QY 1694 ACTCGTTCATTGAGCCTTCAGGGAACCACAATGTCCTCGCTCGCAGTATACGTGGCT 1753
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QY 1814 TGGACCCGCTCTTTGGAGGTCGTGGCTTTGTACCCCTTTGTTCCAGGTTCTCCAACTGAGA 1873
Db 1913 TGGCTCTGTTGTTGGTGGTTCGGGATTCGTTCCCTTTGTCCCTGTTCTCCGACTGAGA 1972
QY 1874 GAAACCCCTCTGATCTTAGTAAAGCTTGAGGTTAAGTGGGAGAAAGAGCTT 1924
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RESULT 4

US-10-425-114-20609
; Sequence 20609, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 20609
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3242-431-A12_FLI
US-10-425-114-20609

Query Match 38.4%; Score 837.4; DB 16; Length 1915;
Best Local Similarity 71.2%; Pred. No. 7; 7e-197;
Matches 1143; Conservative 0; Mismatches 441; Indels 21; Gaps 2;

QY 294 TTCTCTAGTGTGAAACTGCGCTTCGTTATCGACATCTGATCAGCTTCTGTGGTTGCGTT 353
Db 2 TTCGTGTTTCAAAATTTGAAACGTTATCCACCTCAGACCATGCTCCGTGGTCTCCAT 61
QY 354 GAATCTTTTGTGCACTTCTTTGTGCTGTATGTTCTTGTGTATCTTTTGGAGAGAA 413
Db 62 GAATCTTTTGTGCGACTTCTTTGTGTTGTATTGCTCTCCCTTGGCCATCTTCTTGGAGAA 121
QY 414 TAGATGATGAACGATCCATCCACCGCTTGTGATTCGGCTTAGGCACCTGGTGTACCAT 473
Db 122 TCGATGGAATGAACGAGTCTATCAGTCCCTTTTGTGTTGTGTTTTCACCTGCGGTAGTCA 181
QY 474 TTTGTTGATTAGTAAAGGAAAGCTCGCATCTTCTCGTCTTTTACTGAGATCTTTTCTT 533
Db 182 TTTGCTGTTTGTGTTGGCGAAAGCTCACAATTTCTTGTTTTCACTGAGATCTTTTCTT 241
QY 534 CATATATCTTTTGGCAACCATTAATTCATGACAGGTTTCAAGTAAAAAGAACAGCTT 593
Db 242 TATATACTTCTTACCACTTAATATTCATGTCGGGTTTTCAGGTGAAAGAACAGCTT 301
QY 594 TTTCCGCAATTCGTTGACTATATGCTTTTTCGTTGCTGTTGGGACTATTTATTTCTTGCAC 653

QY 772 CAGGTTCTGAATCAAGACGAGACACACCTTTGCTTTTACAGTCTTGTTATTCGGAGGGGTGTT 831
Db |||||
QY 496 CAGTGTCTAAATCAGGATGAGACACCTTTGCTGTACAGTCTTGTTATTTGGGAGGGTGT 555
Db |||||
QY 832 GTGAATGATGCAACGTCAGTGTGGTCTTCAACGCGAATCAGAGCTTTGATCTCACTCAC 891
Db |||||
QY 556 GTGAATGATGCTACATCAGTGGTGTCTTTCAATGCAATCCAAAGCTTTGACCTCAACCAA 615
Db |||||
QY 892 CTAAACACGAGAGCTCTTTTCATCTCTTTGGAACTCTTGTTATTTGTTCTCTCAAGT 951
Db |||||
QY 616 ATTGACTCTTCAATTCGTGTACACTTTTGGGAAATTTCTGTATCTATTATTGCAAGC 675
Db |||||
QY 952 ACCTTGTCTGTGCTGCAACCGGTCTGATAAGTCGGTATGATATCAAGAAGCTATATTT 1011
Db |||||
QY 676 ACAATGTTGGAGTTTTCACAGGCTCTACTAGTCTTACATATTAAAGAGCTGTACATT 735
Db |||||
QY 1012 GGAAGGCACTCAACTGACCGAGAGGTTGCCCTTAATGATGCTTATGGCGTATCTTCTTAT 1071
Db |||||
QY 736 GGCAGGCACTCTACAGATCGTGAGGTGCTCTTATGATGTTAATGGCATACCTGTCTTAC 795
Db |||||
QY 1072 ATGCTTGTGAGCTTTTCGACTTTCAGCGGTATCTCTCACTGTGTTTCTGTGGTATTTGTG 1131
Db |||||
QY 796 ATGCTTGTGAAATATGATGTTACTGAGTGGCAATCTCACTGATTTCTTTTGGTATTTGT 855
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QY 1132 ATGTCCCAATTACACATGCCAATGTAAACGGAGAGCTCAAGATAAACAACAAGCATACC 1191
Db |||||
QY 856 ATGTCTCATTTACTCGCATTAACGTCGACCGAGAGTTCAAGAACTCACTACCAAGCAATCT 915
Db |||||
QY 1192 TTTCGAATTTGTCAATTTCTTCGGGAGACATTTATTTTCTTGTATGTTGGAATGATGCC 1251
Db |||||
QY 916 TTTCGAACCTTGTCTTTTGTGCTGAGATCTTTATCTCTCTTTATGTTGGTATGGATGCC 975
Db |||||
QY 1252 TTGCACATTTGACAGTGTGAGATCCGTGATGTCACACCGGGAACATCGATCGAGTGAGC 1311
Db |||||
QY 976 TTGCACATTTGAAATGAAATTTGTGAGTATGAGCCCTGGAAACATCTGTAGCAACTGAT 1035
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QY 1312 TCAATCTTAAATGGGTCTGGTCAATGTTGGAAGAGCAGGTTGCTCTTTCCGTTATCGTTT 1371
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QY 1036 TCAGCTTATTTCTGTCTAATTTCTTCTGGAGAGCAGCTTTGTTTCCCTTATCTCTTC 1095
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QY 1372 CTATCTAATCTAGCAAGAAATCAAGCGGAGAAATCAACTTTAAATGATCGAGTTGTG 1431
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QY 1096 ATATCCAACTTTGGCTTAAATAATCAACAAATGAGAAATCAGCTTCAGACAGCAAGTGATC 1155
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QY 1432 ATTTGTGCTGTCTGCTCATGAGAGTCTGATCTATCTATGCTCTTGTGATCAACAAGTTT 1491
Db |||||
QY 1156 ATTTGGTGGGTGGCTTTATGAGAGGTGCTGTTTCAATCGCACTTGCAATATATCAGATC 1215
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QY 1492 ACAAGGGCGGGCACACAGATGTACCGGGGAATGCAATCATGATCAGAGTACGATAACT 1551
Db |||||
QY 1216 ACCATGTCGGGGCACACTTCACTGCGAAGCAATGCAATCATGATCAACAAGCACCATCACT 1275
Db |||||
QY 1552 GTCTGTCTTTTACAGAGTGGTGTGTTGATGCTGACAAACCACTATAGCTACCTA 1611
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QY 1276 GTTGTGCTTTTTCAGACACAGTGTGTTGCTCTGTTGACTAAGCCACTCATAGGCTTTTA 1335
Db |||||
QY 1612 TT-----ACCCGACACAGACGCCACACAGCATGTTATCTATGATGACAAACACC 1659
Db |||||
QY 1336 CTGCCCCATCTCCACATCATAAAGATCAAGCATCAAGATATCAAGATCCATCTACT 1395
Db |||||
QY 1660 CCAAAATCCATATATCCCTTTTGTGGACCAAGACTCGTTCAATTGAGCTTTCAGGAA- 1718
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QY 1396 CCAAGTCCAAATCAGTCACTATCCCACTTCTTGGGAGTGCCCAAGAACTCTGAAGTTGAT 1455
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QY 1719 -----CCAAATGTGCTCGGCTGACAGTATACGTGGCTTCTTGACACGGGCCACT 1770
Db |||||
QY 1456 ATFCGATGGCCATGATATTCATCGTCCAGCAGTATTCGTGGCTTGTCTTACGACTCCAA 1515
Db |||||
QY 1771 CGAACCGTGCTACTACTGGAGACAAATTTGATGACTCCCTTCATCGACCCCTCTTTGGA 1830
Db |||||
QY 1516 CACATGTTTCATCGTTTGTGGGTAGTTTGTATGATGCAATTCATGGTCTCTTTTGTGT 1575
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QY 1831 GGTGCTGGCTTTGTACCCCTTTGTTCCAGTGTCTTCCAACTGAGAGAAA 1877

Db 1576 GGCAGGGGTTTTGTTCTCTGTAGAACCTGGCTCCAACTGAACGTAA 1622
RESULT 6
US-10-369-324-38
; Sequence 38, Application US/10369324
; Publication No. US2003022121A1
; GENERAL INFORMATION:
; APPLICANT: ROMMENS, CAIUS
; APPLICANT: YE, JINGSONG
; APPLICANT: MENENDEZ-HUMARA, JAIME
; APPLICANT: YAN, HUA
; APPLICANT: RICHARD, CRAIG
; APPLICANT: BRINKERHOFF, W. LEIGH
; APPLICANT: SMORDS, KATHY M. M.
; TITLE OF INVENTION: PRECISE BREEDING
; FILE REFERENCE: 058951/0162
; CURRENT APPLICATION NUMBER: US/10/369,324
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/357,661
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: 60/377,602
; PRIOR FILING DATE: 2002-05-06
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 38
; LENGTH: 1620
; TYPE: DNA
; ORGANISM: Solanum tuberosum
US-10-369-324-38
Query Match 36.6%; Score 797.6; DB 15; Length 1620;
Best Local Similarity 69.3%; Pred. No. 5.2e-187;
Matches 1101; Conservative 0; Mismatches 484; Indels 3; Gaps 1;
QY 287 TGTGGAATCTCTAGTGTGCAAACTGCCCTGCTTATCGACATCATGATCACGCTTCTGTGG 346
Db |||||
QY 347 TTGCGTTGAATCTCTTTGTGCACTCTTCTGCTGTGTTATGTTCTTGGTCACTCTTTGG 406
Db |||||
QY 71 TATCCATCAACCTCTTTGTGCACTCTTCTGCTGTGCTGCTGCTGCTGCTGCTGCTGCTG 130
Db |||||
QY 407 AAGGAAATAGATGATGAACGAATCCATCACCGCTTGTGATTGGCTAGGCACTGCTG 466
Db |||||
QY 131 AGGAGACCGCTGGGTTAATGAGTCCATTACTGCCCTCATATTTGTTGTGTCAGGAG 190
Db |||||
QY 467 TTACCATTTGTTGATGTATGATGAAGAAAGCTGCACTCTCTGCTCTTTAGTGAATC 526
Db |||||
QY 191 TGGTTATCTCTGCTGTAAGTGTGGAAGAACTCACACCTTCTGCTTTTCAGTGAAGATC 250
Db |||||
QY 527 TTTTCTTCATATATCTTTTGGCCACCATTTATTAATCAATGCAAGGTTTCAAGTAAAGAA 586
Db |||||
QY 251 TCTTTTTCATATATGATCTCTTCCCATCATATTTAATGCAAGGTTTTCAGTAAAGAA 310
Db |||||
QY 587 AGCAGTTTTTCCGCAATTTCTGATATTAATGCTTTTGTGCTGTTGGGACTATATTT 646
Db |||||
QY 311 AGCAATTTTCTGTAACCTTCACTAATATGATCTTCGAGCCATTTGTAACCTGCTCT 370
Db |||||
QY 647 CTGCAACATCATATCTCTAGTGTAAACAGCTCTTTTAAAGAGTTGACATTTGAACT 706
Db |||||
QY 371 CATGTGCCATTTATATCATTTAGTGTCAATTTCAAACTTTCAAGAGTTGACATTTGAATTC 430
Db |||||
QY 707 TTGACTTGGGATTTATCTTGTATTTGGTGCATATTTGCTGCAACAGATTCAGTATGTA 766
Db |||||
QY 431 TAGATATTTGGGATTTATCTTGAATTTGAGCAATTTGCTGCCACAGATTTCCGCTGCA 490
Db |||||
QY 767 CACTCAGGTTCTGAATCAAGACGACACCTTTGCTTTACAGTCTTGTATTTGCGAGAG 826
Db |||||
QY 491 CATTGCAAGTCTTACATCAGGATGAGACACCCCTCTTTTACAGTCTTGTATTTGGAGAG 550
Db |||||
QY 827 GTGTTGTGAATGATCAACAGTGTGTTGCTTCTTCAACGCGATTCAGAGCTTTGATCTCA 886

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Db 551 GAGTTGTAATGATGCTACATCGGTGGTCTTTCAATGCTATTCAAAACCTTGACCTTA 610
Qy 887 CTCACCTAAACACGAGCTGTTTTCATCTCTTGGAACTCTTGTATTGTTTCGCC 946
Db 611 CGAGGTGATCCCGATGAGCCCTCAGTTTCCCTTGGCACTCTCTATCTGTTCTTG 670
Qy 947 TAAGTACCTTGGTGGTCTGCAACCGGTCTGATAAGTGGGTATGTTATCAAGAGCTAT 1006
Db 671 CTAGACCTTACTGGAGCAGGACTGCTCTTCTTAGTGGCTTACATATCAAGAGCTGT 730
Qy 1007 ACTTGGAGGACTCAACTGACGAGAGGTGGCTTATGATGCTTATGGCTATCTTT 1066
Db 731 ATTTTGGCAGGACTCCACAGATCGTAGGTTGCCCTTATGATGCTCATGCTTACTTAT 790
Qy 1067 CTTATATGCTTGGTGGCTTTCGACTTGGAGGTATCTCTACCTGCTGTTTCTTGTGGTA 1126
Db 791 CATACATGCTGGCTGAATCTTCTTATTTGAGTGGATTTCTCACTGTATTTTCTGTGTA 850
Qy 1127 TTGTGATGTCCCAATCACATGGCACAATGTAACGGAGAGCTCAAGATAACAACAAGC 1186
Db 851 TTGTAATGTCTCAATCACATGGCACAATGTAACGGAGAGTTCAAGACTCACTACAAGC 910
Qy 1187 ATACCTTTGCACTTGTCTTCTTGGGAGACATTTATTTCTTGTATGTTGGAATGG 1246
Db 911 ACGCTTTTGAACCTTGTCAATTTCTTGAGAGACTTTCCTCTTCTATGTCGGCATGG 970
Qy 1247 ATGCTTTGGACATGACAAGTGGAGATCCGTGAGTGACACACCGGAGACATCGATCGAG 1306
Db 971 ATGCTTTGGATATCGAGAGTGGAAATTTGTTGGTGAACGCTGGGATTAATCAATTTCCG 1030
Qy 1307 TGAGCTCAATCTTAATGGGCTGTGTCATGTTGGAAGAGAGCGCTTCTCTTCCGTTAT 1366
Db 1031 TGAGTTCAATTAATGATGGATTAATCTTCTGTTGGGAGAGCTGCTTTGTTTTCATAT 1090
Qy 1367 CGTTTCTATCTAATTAGCAGAGAAATCAAGCGAGAGAAATCAACTTTAATCATGCGAG 1426
Db 1091 CATTTCTTCTCAATTAATGAAGAAATCTCGGAGCAAAATTTACCTTTAGGCGAGCAAG 1150
Qy 1427 TTGTGATTTGGTCTGCTGCTCATGAGAGTCTGTATCTATGCTTCTTGCATACACA 1486
Db 1151 TGATAATATGGTGGCGAGTTTGATGAGAGCGCGAGTGTCCATGGCACTGGCATATAATA 1210
Qy 1487 AGTTTCAAGGGCGGSCACACAGATGTACCGGGAATGCAATCATGATCAGCAGTACGA 1546
Db 1211 AGTTCACTGTTGGGACACACTCACTGAGGACATGCAATATGATTTACGAGCAGA 1270
Qy 1547 TAACTGCTGCTTTTGTAGCAGTGGTGTGTTGTTGTAAGTGAACCAACTCATAGCT 1606
Db 1271 TAACTGCTGCTTTTGTAGCAGTGGTGTGTTGTTGTAAGTGAACCAACTCATAGCT 1330
Qy 1607 ACCTATTACCGCACCAAGCGCCACAGCATGTTATCTGATGACACACCCCAAT 1666
Db 1331 TCTGCTGCCACACAGAGCAATGAGTACAGTGTATCAGTGTGCAATGCTGCAAAAT 1390
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Qy 1784 ACTACTGGAGACAATTTGATGACTCTCTCATGGACCGCTTTGAGGCTGTTGGCTTTG 1843
Db 1511 GGTACTGGCGCAAGTTTGAAGTGCATCATGCGCCCTATGTTTGTGGTGTGGGGATTGG 1570
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Db 1571 CTCTCTCTGCTGCTTCTCCAAACGA 1598
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RESULT 7

US-10-607-538-38

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; Sequence 38, Application US/10607538
; Publication No. US20040107455A1
; GENERAL INFORMATION:
; APPLICANT: ROMMENS, CAIUS
; APPLICANT: YE, JINGSONG
; APPLICANT: HUMARA, JAIME M.
; APPLICANT: YAN, HUA
; APPLICANT: SWORDS, KATHY
; TITLE OF INVENTION: PRECISE BREEDING
; FILE REFERENCE: 058951/0167
; CURRENT APPLICATION NUMBER: US/10/607,538
; PRIOR FILING DATE: 2003-06-27
; PRIOR APPLICATION NUMBER: 10/369,324
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/357,661
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: 60/377,602
; PRIOR FILING DATE: 2002-05-06
; NUMBER OF SEQ ID NOS: 139
; SOFTWARE: Patent In Ver. 3.2
; SEQ ID NO 38
; LENGTH: 1620
; TYPE: DNA
; ORGANISM: Solanum tuberosum
US-10-607-538-38
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Query Match 36.6%; Score 797.6; DB 17; Length 1620;
Best Local Similarity 69.3%; Pred. No. 5.2e-187;
Matches 1101; Conservative 0; Mismatches 484; Indels 3; Gaps 1;

Qy 287 TGTGGATCTCTAGTGTGAAACTGCTTGGTTATCGACATCTGATCAGCTTCTGTGG 346
Db 11 TGTGGCTTCTCTGTTTCCAAAACCTGGGCTCTTTGGGTACTTCAGATCATGCTTCTTG 70
Qy 347 TTGCTTGAATCTCTTGTGTGCACTCTTTTGTCTGCTGTATGTTCTTGGTCACTTTGG 406
Db 71 TATCCATCAACCTCTTTTGGGCACCTCTTTGTGCTTGCATCATCTGTCATCTCTTGG 130
Qy 407 AAGAGAAATGATGATGATGAAATCCATCACCGCCTTGTGTTGGCTAGGCACTGGTG 466
Db 131 AGGAGAACCGCTGGTTAATGAGTCCATCTACTCCCTCATATTTGTTGTGTACAGGAG 190
Qy 467 TTACCAATTTTGTGATGATGAAAGAAAGCTCGCATCTCTCGTCTTTTGTGTAAGATC 526
Db 191 TGGTTATCTGCTCGTAAGTGGTGGAAAGAACTCACACCTTCTGTTTTCAGTGAAGATC 250
Qy 527 TTTTCTTCATATATCTTTTGGCACCCATATATTCATGCGGGTTTCAAGTAAAGAAAGA 586
Db 251 TCTTTTTCATATATGATCTCTCCCAATCATATTTAATGAGGGTTTCAGGTAAAAAGA 310
Qy 587 AGCAGTTTTCGCAATTTCTGTAATTTATGCTTTTGTGCTGTTGGGACTTATTTATTT 646
Db 311 AGCAATTTTTCGTAACCTTCATCTATATAATGATGTTTCGAGCCATTTGTCCTGCTCT 370
Qy 647 CTTGCAATCATCTCTAGTGTAAACAGTTCTTTAAGAAAGTTGGAATGGAACCT 706
Db 371 CATGTGCCATTTATCATTTAGGTGCAATTTCAAACTTTCAAGAAAGTTGGAATTTTC 430
Qy 707 TTGACTTGGTGTATCTTGTATTTGTCATATTTGTCATATTTTGTGCAACAGATTGATGTA 766
Db 431 TAGATTTGGGATTTATCTTGAATTTGAGCAATATTTGCTCCACAGATTCGCTCTGCA 490
Qy 767 CACTGAGGTTCTGAATCAAGACGACACCTTTTGTCTTACAGTCTTGTATTCGGAGAG 826
Db 491 CATTCAGGCTCTACATCAGGATGAGACACCTCTCTTTACAGTCTTGTATTTGGAGAG 550
Qy 827 GTGTTGTGAATGATGCAAGCTCAGTTGTGGTCTTCAACGCGATTTCAGAGCTTTGATCTCA 886
Db 551 GAGTTGTAAATGATGCTACATCGGTGGTGTCTTTCAATGCTATTTCAAAACCTTTGACCTTA 910
Qy 887 CTCACCTAAACCAAGAGCTGCTTTTTCATCTCTTCTGGAACCTCTTGTATTTGTTCTCC 946
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Db 611 CGAGCGTGAATCCAGATATAGCCCTCAGTTTCCTTGGCAACTTCTTCTATCTGTTCTTG 670
QY 947 TAAGTACCTTGTGTTGGTGTGCAACCGGTCTGATAGTGGTATGTTATCAAGAAGCTAT 1006
Db 671 CTAGCACTTTACTGGGAGGAGAACTGCTCTTCTTAGTGTTCATTTATCAAGAAGCTGT 730
QY 1007 ACTTTGAAGGCACTCAACTGACCGAGAGGTTGCCCTTATGATGCTTATGCGGTATCTTT 1066
Db 731 ATTTTGCGAGGCACTCCACAGATCGTGAGGTGCCCCCTTATGATGCTCATGGCTTACTTAT 790
QY 1067 CTTATATGCTTGTGAGCTTTTCGACTTTGACGCGTATCCTCACATGTTGTTTTCTGTGTA 1126
Db 791 CATACATGCTGGCTGAACCTATTTCTATTGAGTGGGATTTCTCACATGTTATTTCTGTGTA 850
QY 1127 TTGTGATGTCCATATACATGCGCAATATGTAACGGAGAGCTCAAGATATACACAAGC 1186
Db 851 TTGTAATGTCTCATATACCTTTGGCACAAATGTGACCGAGAGTCAAGAGTCACTCAAGGC 910
QY 1187 ATACCTTTGCAACTTTGTCATTTCTTGGGAGACATTTATTTCTTGTATGTTGGAATGG 1246
Db 911 ACGCTTTTGGCACTTTGTCATTTCTTGGAGAGACTTTTCTCTTCTTCTTCTTCTTCTTCT 970
QY 1247 ATGCTTTGGCACTTACACAAGTGGAGATCCGTGAGTGACACACCGGGAACATCGATGCGAG 1306
Db 971 ATGCTTTGGATATCGAGAGTGGAAATTTGTTGTTGACAGGCTTGGATTTCAATTTCCG 1030
QY 1307 TGAGCTCAATCTTAATGGCTGTGGTCTGTTGAGAGAGCGGTTCTGCTTTTCTGTTAT 1366
Db 1031 TGAGTTCAATCTGATGGGATTAATCTTGTGTTGGGAGAGCTGSCCTTTGTTTTCATTTAT 1090
QY 1367 CGTTTCTATCTAACTTACCCCAAGAGAAATCAAGCGAGAAATCAACTTTAACTATGCAAG 1426
Db 1091 CATTTCTTCCAACTTAATGAGAAATCTCGGAGCAAAATTTACCTTTAGGCGAGCAAG 1150
QY 1427 TTGTGATTTGGTGTGTTGCTCTCATGAGAGTGTGTTATCTATGCTTTGATACACA 1486
Db 1151 TGATAATATGTTGGGCAAGTTTGTATGAGAGGCGAGTGTCCATGSCACTGGCATATAATA 1210
QY 1487 AGTTTACAGGCGCGGACACACAGATGTACGGGGAATGCAATCATGATCAGATACGA 1546
Db 1211 AGTTTCACTCGTGGGGGACACACTCAACTGCAGGCAATGCAATATGATATACGACGA 1270
QY 1547 TAACTGTCTGCTTTTGTAGCAGTGTGTTTGTGATGCTGACCAAAACCACTCATAGCT 1606
Db 1271 TAACTATGTTCTTATCAGCAATGTTATCGGTTTAAATGACAAAACCCCTTAAGTC 1330
QY 1607 ACCTATTACCGCACACAGAAOGCCACACAGAGCATGTTATCTGATGACAAACCCCAAAAT 1666
Db 1331 TCCTGCTGCCACACAGAGGCAATTTGATGAGAGGCGAGTGTCTATCAGGTGCAAAATCTCCAAAGT 1390
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QY 1844 TACCTTTGTTCCAGGTTCTCCAACTGA 1871
Db 1571 CTCTCTCTGCCCTGTGTTCTCCAAACGGA 1598

RESULT 8

US-10-369-324-37

; Sequence 37, Application US/10369324
; Publication No. US2003022123A1
; GENERAL INFORMATION:
; APPLICANT: ROMMENS, CAIUS

; APPLICANT: YE, JINGSONG
; APPLICANT: MENENDEZ-HUMARA, JAIME
; APPLICANT: YAN, HUA
; APPLICANT: RICHARD, CRAIG
; APPLICANT: BRINKERHOFF, W. LEIGH
; APPLICANT: SWORDS, KATHY M. M.
; TITLE OF INVENTION: PRECISE BREEDING
; FILE REFERENCE: 058951/0162
; CURRENT APPLICATION NUMBER: US/10/369,324
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/357,661
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: 60/377,602
; PRIOR FILING DATE: 2002-05-06
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 37
; LENGTH: 1621
; TYPE: DNA
; ORGANISM: Solanum tuberosum
US-10-369-324-37

Query Match 36.5%; Score 794.4; DB 15; Length 1621;
Best Local Similarity 69.2%; Pred. No. 3.3e-186;
Matches 1099; Conservative 0; Mismatches 486; Indels 3; Gaps 1;

QY 287 TGTGGGATTTCTCTAGTGTGCAAACTGGCTTCGTTATGACATCTGATCAGCTTCTGTGG 346
Db 11 TGCTGGCTTCTCTGTTTCCAAAACCTGGGCTCTTTGGGTACTTCAGATCATGCTTCTGTG 70
QY 347 TTGCGTTGAATCTCTTTGTGCACTTCTTTGTGCTGTGTTGTTCTTGTGTTCTTGTGTTGG 406
Db 71 TATCCATCAACCTCTTTGTGCACTCTCTTTGTGTTGTCATCATTTGTTCTATCTCTTGG 130
QY 407 AAGAGATAGATGATGAACGAATCCATCAGCGCTTCTTGTATGGGTAGGCACTGTGG 466
Db 131 AGGAGAACCGCTGGGTTAATGAGTCCATTACTGCCCCATTAATGTTGTTGTACAGAG 190
QY 467 TTACCATTTTGTGATTAAGTAAAGGAAAAAGCTCGCATCTTCTGCTCTTTAGTGAAGATC 526
Db 191 TGGTTATCTTCTCGTAAGTGTGTAAGAGCTCACACCTTCTGTTTTTCAGTGAAGATC 250
QY 527 TTTTCTTCATATATCTTTTGTGCAACCCATTAATCAATGCAAGGTTTCAAGTAAAAAGA 586
Db 251 TCTTTTTCATATATGTAATCTCTCCATCATATTAATGCAAGGTTTTCAGGTAAAAAGA 310
QY 587 AGCAGTTTTCGCAATTTGCTGACTATTTATGTTTGTGTTTGTGTTTGTGTTTGTGTTT 646
Db 311 AGCAATTTTTCGTAACCTTCACTATTAATGATGTTTGGAGCCATTGGTACCTTGGTCT 370
QY 647 CTTCACCAATCATATCTCTAGTGTAAACACAGTTCTTTAAGAAAGTTGACATTTGAACT 706
Db 371 CATGTGCCATTAATCATTTAGTGTCAATTTCAAACTTTCAAGAAAGTTGACATTTGAT 430
QY 707 TTGACTTGGGTGATTAATCTTGTGTTGTCATATTTGCTGCAACAGATTTCAGTATGTA 766
Db 431 TAGATAATTTGGGGAATATCTTGCATTTGGAGCAATATTTGCTGCCACAGATTCCGTTCT 490
QY 767 CACTGCAAGTCTGAATCAAGACGAGACACCTTTTCTTTTACAGTCTTGTATTCGGAGAG 826
Db 491 CATTCGAGTCTCTATCATAGGATGAGACACCCCTCTTTACATCTTGTATTTGGAGAG 550
QY 827 GTGTTGTGAATGATGCAACAGTGTGTTGTTCTTCAACCGGATTCAGAGCTTTGATCTCA 886
Db 551 GAGTTGTAATGATGCTACATCGGTGTTGTTTCAATGCTATTTCAAACTTCGACCTTA 610
QY 887 CTCACCTAAACCAAGAGCTGTTTCTCTTCTTTTGGAAACTTCTGTTATTTGTTCTCC 946
Db 611 CGAGCATGAATCCAGTATAGCCCTCAGTTTCTTTGGCAACTTCTTCTATCTTCTTCTG 670
QY 947 TAAAGTACCTTGTGTTGTCGCAACCGGTCTCATAAAGTCCGTATGTTTATCAAGAAGCTAT 1006
Db 671 CTAGCACTTTACTGGAGCAGGAAGTGTGTTCTTTAGTGTCTTACATTAACAAGAAGCTAT 730

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QY 1007 ACTTTGGAAGGCACTCAACTGACGAGAGGTTGCCCTTATGATGCTTATGCGGTATCTTT 1066
Db |||||
QY 731 ATTTTGGCAGGCACTCCACAGATCGTAGGTTGCCCTTATGATGCTATGCGCTTACTTAT 790
Db |||||
QY 1067 CTTATATGCTTGTGAGCTTTTTCGACCTTGTAGCGGTATCCTCACGTGTGTTTTTCTGTGGTA 1126
Db |||||
QY 791 CATACTTGTCTGGCGGAATTAATCTATTGAGTGGGATTCACCGTCTTTTCTGTGGTA 850
Db |||||
QY 1127 TTGTGATGTCCTTACATACATGCGACATGTAAACGGAGAGCTCAAGATTAACAAGG 1186
Db |||||
QY 851 TTGTAATGTCTACACTAGCTGGCAATGTGACCGGAGAGTCAAGAGTCACTACAAGG 910
Db |||||
QY 1187 ATACCTTTGCAACTTTCTCATTTCTCGGAGACATTTATTTCTGTATGTTGGAATGG 1246
Db |||||
QY 911 ACACCTTTGCAACTTTCTCATTTCTGAGAGACTTTCTCTCTCTATGTCGGCATGG 970
Db |||||
QY 1247 ATGCTTTGGACATTTGACAAAGTGGAGATCCGTGAGTGACACACCGGGAACATCGATCGAG 1306
Db |||||
QY 971 ATGCTTTGGATATCGAAGTGGAAATTTGTTGGTGACAGGCTGGATTAATCAATTTCCG 1030
Db |||||
QY 1307 TGAGCTCAATCCTTAATGGGTCTGTGTCATGTTTGAAGAGAGAGCGTTGCTCTTTCCGTTAT 1366
Db |||||
QY 1031 TGAGTTCAATFACTGATGGGACTAATCTTGCTTGGGAGAGCTGCTTTGTTTTCCATTAT 1090
Db |||||
QY 1367 CGTTTCTATCTAACTTAGCCAAAGAAATCAAAAGCGAGAAATCAACTTTTAAACATGCAGG 1426
Db |||||
QY 1091 CATTCATCAACTTAATGAGAAATCTCGGAGCAAAATTAACCTTTAGGAGCAAG 1150
Db |||||
QY 1427 TTGTGATTTGGTGTCTGCTCATGAGAGTGTCTGTATCTATGCTCTTTGCATACAACA 1486
Db |||||
QY 1151 TGATAATATGGTGGGAGGTTTGTATGAGAGCGGAGTGTCCATGGCACATGCAATAATA 1210
Db |||||
QY 1487 AGTTTACAAGGGCGGSCACACAGATGACGCGGAATCAATCATGATCACGAGTAGGA 1546
Db |||||
QY 1211 AGTTCACTGTGGGGGACACACTCAACTGCAGGACAAATGCAATAATGATTAACGAGCAGA 1270
Db |||||
QY 1547 TAACTGTCTGCTTTTGTAGCACAGTGTGTTGTTGATGCTGACCAACCACTCATAGCT 1606
Db |||||
QY 1271 TAACCATGTTCTATTACGACAAATGATTCGGTTTAAATGACAAACCCCTTATAAGTC 1330
Db |||||
QY 1607 ACTATTACCGCACCAAGACCGCCACCGAGCTGTTTATCTGATGACAAACCCCAAAAT 1666
Db |||||
QY 1331 TCCTGTGTCACACAGGCAATTTGAGTACAGTGTCTATCAGGCGCAATTACTCCAAAGT 1390
Db |||||
QY 1667 CCATACATATCCCTTTGTTGGAC---CAAGACTGTTTCATGAGCCTTTAGGGAAACACA 1723
Db |||||
QY 1391 CTCTAACAGCCCACTCCTTAGGCGAGTCGAGAGGACTCTGAAGTTGAATTTAAATGTTCCAG 1450
Db |||||
QY 1724 ATGTGCTCGGCTGACAGTATACGTGGCTTCTTTGACAGGCGCCACTCGAACCCTGCATT 1783
Db |||||
QY 1451 ATCTTCTCACCCACCAAGTTTGAGGATGCTACTTACCGCACCAAGTCAATAGTGCATC 1510
Db |||||
QY 1784 ACTACTGGAGACAATTTGATGACTCCTTCATGCGACCCGCTTTTGGAGGTCGTGGCTTTG 1843
Db |||||
QY 1511 GGTACTGGCGCAAGTTTGAAGATGATTCATGCGCCCTATGTTTGGTGGTGGGATTTG 1570
Db |||||
QY 1844 TACCTTTGTTCCAGGTTCTCCAACTGA 1871
Db |||||
QY 1571 CTCCTCTGCCCCCTGGTTCTCCAAACGA 1598
Db |||||
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RESULT 9

US-10-607-538-37

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; Sequence 37, Application US/10607538
; Publication No. US20040107455A1
; GENERAL INFORMATION:
; APPLICANT: ROMMENS, CAIUS
; APPLICANT: YE, JINGSONG
; APPLICANT: HUMARA, JAIME M.
; APPLICANT: YAN, HUA
; APPLICANT: SWORDS, KATHY
; TITLE OF INVENTION: PRECISE BREEDING
```

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; FILE REFERENCE: 058951/0167
; CURRENT APPLICATION NUMBER: US/10/607,538
; CURRENT FILING DATE: 2003-06-27
; PRIOR APPLICATION NUMBER: 10/369,324
; PRIOR FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/357,661
; PRIOR FILING DATE: 2002-02-20
; PRIOR APPLICATION NUMBER: 60/377,602
; PRIOR FILING DATE: 2002-05-06
; NUMBER OF SEQ ID NOS: 139
; SOFTWARE: PatentIn Ver. 3.2
; SEQ ID NO 37
; LENGTH: 1621
; TYPE: DNA
; ORGANISM: Solanum tuberosum
; US-10-607-538-37
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Query Match 36.5%; Score 794.4; DB 17; Length 1621;
Best Local Similarity 69.2%; Pred. No. 3.3e-186;
Matches 1099; Conservative 0; Mismatches 486; Indels 3; Gaps 1;
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QY 287 TGTGGATCTCTAGTGTGAAACTGCTTTCGTTATCGACATCTGTATCAGGCTTCTCTGG 346
Db |||||
QY 347 TTGCGTTGAATCTCTTTGTGCACTTCTTTGTGCTTGTATGTTCTTGGTCACTTTTGG 406
Db |||||
QY 71 TATCCATCAACCTCTTTGTGGCACTCTCTTTGTGCTTGCATCATCATTTGGTCACTCTTGG 130
Db |||||
QY 407 AAGAGATAGATGATGACGAATCCATCAACCGCTTGTGATTGGCTAGGCACTGGTG 466
Db |||||
QY 131 AGAGAACCGCTGGTTTATGAGTCCATTTACTGCCCTCATTAATGGTTGTGTACAGAG 190
Db |||||
QY 467 TTACCATTTTGTGATTAGTAAAGGAAAGCTTCGCACTTCTTCGCTTTTGTGTAAGATC 526
Db |||||
QY 191 TGGTTATCTTGTCTGTAAGTGGTGGAAAGAGCTCACACCTTCTGTTTTCAGTGAAGATC 250
Db |||||
QY 527 TTTTCTCATATATCTTTTGGCAACCATTAATTTCAATGAGGGTTTCAAGTAAAAAGA 586
Db |||||
QY 251 TCTTTTTCATATATGTAATCTTCTCCCAATCATATTTAATGAGGGTTTCAAGTAAAAAGA 310
Db |||||
QY 587 AGCAGTTTTCGCAATTTCTGACATTAATGCTTTTGTGCTGTTTGGCACTTATTTT 646
Db |||||
QY 311 AGCAATTTTGTAAACTTCATTAATGATTTGGAGCAATTTGGTACCTGGTCT 370
Db |||||
QY 647 CTTGCAATATCATCTAGTGTAAACAGTCTTTTAAAGAGTTGGAATTTGGAACCT 706
Db |||||
QY 371 CATGTGCCATTAATCATTTAGGTGCCATTCAAACTTTCAAGAAGTTGGACATTTGAATTC 430
Db |||||
QY 707 TTGACTTGGGTGATTAATCTTGTATTTGGTGCATTAATTTGCTGCAACAGATTCAGTAGTA 766
Db |||||
QY 431 TAGATATTGGGGAATTAATCTTGGCAATTTGGAGCAATTAATTTGCTGCCAGATTTCCGTCTGCA 490
Db |||||
QY 767 CACTGCAAGTCTTGAATCAAGACGACACACTTTTGTCTTACAGTCTTGTATTCGGAGAGG 826
Db |||||
QY 491 CATTGCAAGTCTCATCATCAGGATGAGACACCCCTCTCTTACAGTCTTGTATTTGGAGAG 550
Db |||||
QY 827 GTGTTGTGAATGATGCAACGCTGAGTTGTGCTTCTTCAACGCGATTCAGAGCTTTGATCTCA 886
Db |||||
QY 551 GAGTTGTAATGATGCTACATCGGTGGTCTTTTCAATGCTATTCAAACCTTCGACCTTA 610
Db |||||
QY 887 CTCACCTAAACCAAGAGCTGCTTTTTCATCTTCTTGGAAACTTCTTGTATTTGTTCTCC 946
Db |||||
QY 611 CGAGCATGAATCCAGTATAGCCCTCAGTTTCTTGGCAACTTCTTCTATCTCTTCTCTTG 670
Db |||||
QY 947 TAACTACCTTGTCTGCTGTCGCAACCGGCTCATAGTGGTATGTTATCAAGAACTAT 1006
Db |||||
QY 671 CTAGCACTTACTTGGAGAGGAACTGGTCTTCTTAGTGTCTTACATATATCAAGAACTAT 730
Db |||||
QY 1007 ACTTTGGAAGGCACTCAACTGACCGAGAGGTTGCCCTTATGATGCTTATGCTGCTTACTTAT 1066
Db |||||
QY 731 ATTTTGGCAGGCACTCCACAGATCGTAGGTTGCCCTTATGATGCTGCTTACTTAT 790
Db |||||
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QY 1226 TTTTCTTGTATGTTGAATGGATGCTTGGACATTCACAAAGTGGAGATCGTGAGTACA 1285
Db 950 TCTTCTTGTACGTTGAATGGACGCTCTCGATATCGAGAAATGGACGTTGTACGCAACA 1009
QY 1286 CACCGGAAACATCGATCGCAGTCAGTCAATCCTAATGGTCTGGTCAATGTTTGAAGAG 1345
Db 1010 GTCTGGTCAATCGATGGATGATGTTCAATCTCTTGGCTTATCTTCTGGGTGCG 1069
QY 1346 CAGCGTTCGTTTCCGTTATCGTTTCTATCTAATCTAGCCAAAGAAATCAAAGCGAGA 1405
Db 1070 CCGCGTTCGTTTCCATCTTCTTCTTGTCCAAATTAACAAAGTCTTCAACCGATGAGA 1129
QY 1406 AATCAACATTTAATGACGAGTTGTGATTTGGTCTGGTCTCATGAGAGGTGCTGTAT 1465
Db 1130 AATGACATTAAGAAACAAAGTAACATTTGGTGGCTGTGTGATGCGGTGGAGTGT 1189
QY 1466 CTATGGCTCTTGATACAAACAACTTTTACAAGGGCGGGCACACAGATGTACGCGGAATG 1525
Db 1190 CAATGGCTCTTGTATTAACAGTTTCACTTCACTTCAAGACACCAAGTCTTGGGAACG 1249
QY 1526 CAATCATGATCAGGATGACGATGATGCTGCTTTTATAGCAGAGTGGTGTGATGTC 1585
Db 1250 CTATCATGATCAGGATGACGATGATGCTGCTTTTATAGCAGAGTGGTGTGATGTC 1309
QY 1586 TGACCAAAACCACTATAAGTCTATTAACGACACGAGACCAACGAGATGTTAT 1645
Db 1310 TAACCAAAACCGTTAGTCAAAACATTTGAGCGCTTCAACAAACAGTCTTCAACGACGCG 1369
QY 1646 CTGATGACAAACACCCAAATCATATATCTTGTGGACCAAGACTCGTTCAATG 1705
Db 1370 TGCAGATCACATAAGATCTTCTTCCAGATCCGATCTCCATGAGCGTGTCTCAGTA 1429
QY 1706 AGCTTTCAAGGAACCAATGTCCT ---CGGCTGACAGTATACGTCGCTTCTGACAC 1762
Db 1430 CCAAGGCCAGTCAGAAATACGACCTTGAAACAAATGTTAGCTTCAAGATGTTCTGGAAT 1489
QY 1763 GGGCCACTGAAACCGTACTACTACTGAGAGAAATTTGATGACTCTTCACTGCGACCG 1822
Db 1490 CTCGCTCCAGGGCCATTCATCTACTGAGGAAATTCGATACGAGATGTCGTCGCA 1549
QY 1823 TCTTTGGAGTCTGGCTTGTATCCCTTGTCTCCAGTCTCCAACTGAGAGAAACCTTC 1882
Db 1550 TATTTGGTGGCGAGGGTTCACAGTAGTTCAGGTTCCACCATGAGATAGTGTTC 1609
QY 1883 CTGATCTTAGTAAAGCTGAGGGTAAAGTGGAGAAAG 1921
Db 1610 CGAATGGAGTGAAGAAGTAGAAACAAAGAAACAAACG 1648

RESULT 11

US-10-409-701-22
; Sequence 22, Application US/10409701
; Publication No. US20030221224A1
; GENERAL INFORMATION:
; APPLICANT: Zinselmeyer, Chris
; APPLICANT: Helentjaris, Timothy G.
; TITLE OF INVENTION: Enhanced Silk Exsersion Under Stress
; FILE REFERENCE: 1421
; CURRENT APPLICATION NUMBER: US/10/409,701
; CURRENT FILING DATE: 2003-04-08
; PRIOR APPLICATION NUMBER: US 60/370,796
; PRIOR FILING DATE: 2002-04-08
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 1638
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1638)
US-10-409-701-22

Query Match 31.3%; Score 682.6; DB 15; Length 1638;
Best Local Similarity 65.6%; Pred. No. 1.8e-158;
Matches 1029; Conservative 0; Mismatches 534; Indels 6; Gaps 2;
QY 318 GTTATCGACATCTGATCAGCTTCTGCTGTTGCGTTGAATCTCTTTGTTGCACTTCTTTCG 377
Db 39 GCTCTCGGTCTCGATCAGACGCCATCGTCTGATTAACATCTTCTCATCGCGTGTCTG 98
QY 378 TGCCTTGTATTTGTTTGGTCACTCTTTTGAAGAGAAATAGATGATGAACGAATCCATCAC 437
Db 99 CAGCTGCAATGTCATCGGCCACTTCTGCTGAAGGAAACCGATGGGTGAACGAGTCCATCAC 158
QY 438 CGCTTTGTTGATTTGGCTAGGCACTGCTGTTTACCAATTTTGGTATTAGTAGTAAGAAAAAG 497
Db 159 CGCGCTGTGTCATGGGCTCATCACCGGAGCGCTCATCCTGCTGGTTACTAATGGGCAAA 218
QY 498 CTCGCACTCTTCGCTCTTTTAGTGAAGATCTTTTCTTATATATCTTTTGCACCCATTAT 557
Db 219 CTCACGATCTTGTGTTTCAAGTAAAGAAAGCAATTTCTTCCGCAACTTTTATTAACGATAT 278
QY 558 ATTCAATGACGGGTTTCAAGTAAAGAAAGCAGTTTTCGCAATTTCTGTCATATTAT 617
Db 279 CTTCAATGCGGGTTTCAAGTAAAGAAAGCAATTTCTTCCGCAACTTTTATTAACGATAT 338
QY 618 GCTTTTGTGCTGTTGGGACTATTATTTCTTGCACAAATCATATCTCTAGGTGTACACA 677
Db 339 TTTGTTGCTGCTATTGGGACTCTGATTTCTTTTGAATTAATCTCTTTGCTATGGG 398
QY 678 GTTCTTTAAGAGTTTGGACATTTGGAACCTTTGACTTTGGGTGATTAATCTTGTATTTGGTGC 737
Db 399 GTTGTTCAGAAACTTGTATTTGGTCCACTCGAGCTTGGGACTATCTTGGCAATTTGGTGC 458
QY 738 CATATTTGCTGCAACAGATTCAGTATGTACACTGACAGTTTCTGAATCAAGACGAGACACC 797
Db 459 TATTTTCTCGGCAACAGATTTCTGTTTGACCTTTACAGGTGCTTTAACAGGATGAACACACC 518
QY 798 TTTGCTTTACAGTCTTGTATTCGGAGAGGTTGTGTAATGATGCAACGTCAGTTGTGGT 857
Db 519 CCTACTCTATAGTCTAGTCTTTGTTGAGGTTGTGTTAATGATGCCACATCTGTTGTGCT 578
QY 858 CTTCAACGGATTCAGAGCTTTGATCTCACTCACTCAACCTAAACACGAGCTGCTTTTCATCT 917
Db 579 CTTCAATGCAATGAAACCTTGTATTTGATTAATTTTGTGCTATTTGTTCTGTTGAATTT 638
QY 918 TCTTGGAAACTTCTTGTATTTGTTTCTCCTAAGTACCTTTGCTGTTGTCGCAACCGGTCT 977
Db 639 CGTGGAAATTTCTCTACTTGTCTTCCAGCAGCACCATCTTGGAGTAGTCTACCGGTT 698
QY 978 GATAAGTGGTATGTTATCAAGACTATCTTTTGAAGGCACTCACTGACCGAGAGT 1037
Db 699 GCTTAGTGATACATATATCAAGAGCTCTGTTTTCGACACATTTCAACTGATAGAGAAT 758
QY 1038 TGCCTTTATGATGCTTATGGGCTATCTTCTTATATGCTTGTGAGCTTTTTCGACTTTGAG 1097
Db 759 TTTCTATGATGATCACTGCGATACCTTTTCATACATGATATCAATGCTGTTGACCTGAG 818
QY 1098 CGGTATCTCTCACTGTTTCTTGTGTTGTTGTTGATGTCCTTACATGATGACGACAAATGT 1157
Db 819 TGGAAATTTCTTACTGCTTCTTCTGTTGAATAGTAAATGTCACATTAACATTTGGCATAATGT 878
QY 1158 AACGGAGACTCAAGATTAACAAAGCATACCTTTGCAACTTTGTCATTTCTTTCGGGA 1217
Db 879 GACAGAAAGTTCTAGGGTTACCAACCAAGCATACTTTTGAACCTTTATCATCTATTTCGAGA 938
QY 1218 GACATTTATTTCTTGTATGTTGGAATGATGCTTTGGACATTTGCAAGTGGAGATCCGT 1277
Db 939 AATTTTCTTCTTCTTATGTTGGATGATGATTTGGACATTTGAGAGTGGAAATAGC 998
QY 1278 GAGTGACACACCGGGAACATCGATCGAGTGAAGTCAATTCCTAATGGGTCTGTGTCATGTT 1337
Db 999 TAGTAGCAGTCTTAAGAAACCAATTTGCTTTAAGTGCAATTTATTTGGGCTTGTGTTATGTT 1058


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QY 1338 TGAAGAGCAGCGTCTGCTCTTCCGTTATCGTTTCTATCTAATTAAGCAAGATCA 1397
Db 1059 TGAAGAGCGGCAATTTGTAATCCCTTTGCTGTTCTATCCAACTAAGCAAAAGGAGC 1118
QY 1398 AAGCGAANAATCACTTTAACTATGCAAGTGTGATTTGGTGTCTGGTCTCATGAGAG 1457
Db 1119 CCGTCCAAAGATCTCTTCAAGCAACAAGTAATCATATGGTGGGCTGGTCTCATGAGAG 1178
QY 1458 TGCCTATCTATGCTCTTCATACACAAAGTTTACAAAGCGCCGGGACACAGATGACG 1517
Db 1179 AGCAGTGTCAATTTGCGCTTGCCATAACAAGTTTACAGCATCTGGTCACTGAAGTGG 1238
QY 1518 CGGGAATGCAATCATGATCAGAGTACGATAAAGTCTGTCTTTTATAGCACAGTGTGTT 1577
Db 1239 AGTCAATGCTATCATGATCACCAGCAGATTAATGTTGTTCTATTACAGCAATGGTTT 1298
QY 1578 TGGTATCTGACCAAACTCATAGCTACCTATTAACGACAGACAGAACGCCACCAAG 1637
Db 1299 CGGCTGCTGACGAAGCGCTGCTCAGTCTCTCATCCAC-CAAGGACTGGACTGAACA 1357
QY 1638 CATGTTATCTGATGACACACCCCAAAATCCATACATATCCCTTTGTTGGACCAAGACTC 1697
Db 1358 CGTGTCTGCTCTCAAGCAGTCTATGCTGGACCCACTCTTACTAGCATGA-----T 1412
QY 1698 GTTCATTGAGCCTTCAGGGAACCAAAATGTCCTGGCCCTGACAGTATACGTGGCTTCTT 1757
Db 1413 GGGTCTGACTTTGATGTAGGCGAGATCAACTCCCTCAATACAACTCCAGTTCTATCT 1472
QY 1758 GACAGGCCACCTGCAACCGTGTACTACTAGGAGACAAATTTGATGACTCTTCATGG 1817
Db 1473 CACGCGCCAGCTCGCTCCGTCATCCCTTTGGCGCAAGTTTGACGATCGGTTCATGG 1532
QY 1818 ACCGCTCTTTGGAGTGTGGCTTTGACCTTTTTCAGAGTTCTCCAACTGAGAGAAA 1877
Db 1533 CCGGTTGTCGGGGCGAGGTTTCGTCCTTTTGCTGCTTGGCTGGAGAGAG 1592

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RESULT 12

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; US-10-437-963-92579
; Sequence 92579, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 92579
; LENGTH: 1669
; TYPE: DNA
; ORGANISM: Oryza sativa
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (1)...(1669)
; OTHER INFORMATION: unsure at all n locations
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_91047C.1
; US-10-437-963-92579

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Query Match

25.1%; Score 546.2; DB 17; Length 1669;

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Best Local Similarity 61.2%; Pred. No. 1.2e-124;
Matches 979; Conservative 0; Mismatches 543; Indels 77; Gaps 3;

QY 289 TTGGATTCCTAGTGTGCAAACTGCCTTCGTTATCGACATCTGATCAGCTTCTGTGGTT 348
Db 13 TTGGGAGCTCTCGTTCTCAAAATCCGGCGGCTGTGGTGTGCGACTACGACTCGATGCTC 72
QY 349 GCGTTGAATCTCTTTGTTGCACTCTTTGTTGCTTGTATGTTCTTTGCTCATCTTTTGGAA 408
Db 73 GCGATCAACATCTTGTGGCGCTGCTGTGAGCTGCAATGTGATCGGGACCTGCTGAA 132
QY 409 GAGAATGATGATGAACGAATCCATCACCGCTTGTGATTTGGGTGAGGCTGAGTGT 468
Db 133 GGGAAACCGTGGGTCAATGAATCCATCACCGCTTGTGATTTGGGTGAGGCTGATCACTGGAGGT 192
QY 469 ACCATTTGTTGATTAAGAAAGAAAGCTCCATCTCTCTCTTTTGTAGTGAAGATCTT 528
Db 193 GTGATTCGTCTGTCAGTGTGGGAAAGACTCGACATCTTGTGTTTCAGTGGAGGACTC 252
QY 529 TTCTTCATATATCTTTTCCACCCATATATCAATGCAGGGTTTCAAGTAAAGAAAGAAAG 588
Db 253 TTCTTCATTTTGTCTTCCACGATCATCTTTAATGCTGGTTCAGTAAAGAAAAAA 312
QY 589 CAGTTTTCGGAATTTGTTGACTATATGATGCTTTTGGTGTCTGTTGGGACTATATTTCT 648
Db 313 CAATTCCTCCGCAATTTTATGACAAATTTATTTTATTTGGTGTCTGTTGGGACTATGATTC 372
QY 649 TGCACATCATATCTCTAGGTGTAAACACATCTTTTAAAGAAAGTTGGACATTTGAAACCTTT 708
Db 373 TTTGTGAATATCTCTCTA----- 390
QY 709 GACTTGGGTGATTAATCTTGTCTATTTGTTGCTATTTGCTGCAACAGATTCAGTATGATCA 768
Db 391 -----GCAATTTGGGCTATCTTCTCAGCAACAGATTCGTTTGCACT 432
QY 769 CTCAGGTTCTGAATCAAGACGAGACACCTTTGCTTTTACAGTCTTGTATTTGGGAGAGGT 828
Db 433 TTACAGGTGCTTAAACCAAGACGAAACACCCCTACTCTATAGTCTGTTTGGTGAAGGG 492
QY 829 GTTGTGAATGATCAAGTCAAGTGTGCTTCTCAACGCGATTCAGAGCTTGTATCTCACT 888
Db 493 GTTGTCAATGATGCTATCTGTTGCTCTTTAATGCAATGAAGACATGATGATTTGCT 552
QY 889 CACTAAACCAAGAGCTGCTTTTCTCTTTGGAACCTTCTGTATTTGTTTCTCTCA 948
Db 553 AATTTGATAGCTTGTCTTACTAGGCTTCAAGGAAATTTCTCTACCTATCTTCACT 612
QY 949 AGTACCTGCTTGGTGTGCAACCGGCTCTGATAGTGGCTGATGTTATCAAGAGCTATAC 1008
Db 613 AGTACCTTCTTGGAGTGTGCTGGGTGCTTAGTGTGCTTATTAAGAAACTATGT 672
QY 1009 TTTGGAAGGCACTCACTGACCGAGAGGTTGCCCTTATGATGCTTATGCGGTATCTTCT 1068
Db 673 TTTGCCAGACACTCACTGACAGAAAGTTGCTATCAATGATCTATGCGGTACCTTTCA 732
QY 1069 TATATGCTGCTGAGCTTTTTCGACTTTGAGCGGTATCTCTACTGTGTTTTTCTGTGTTAT 1128
Db 733 TATATGCTGCTGAGTGTGCTTAGTGTGCTTCTCACTGTGTTCTTCTCTCTGGAATA 792
QY 1129 GTGATGTCCCATTTACATGCGCAATGTAAACGAGAGCTCAAGATTAACAAACAGCAT 1188
Db 793 GTAATGTCAATTTACACTTGGCATATGTGACAGAAAGCTCTAGGATTAACCAAGCAC 852
QY 1189 ACCTTTGCACCTTTTCTTCTTTGCGGACATTTATTTTCTTGTATGTTGGAATGGAT 1248
Db 853 ACTTTTGTACTTTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT 912
QY 1249 GCCTTGAACATGACAGTGGAGATCCGTGAGTGAACACCGGGAACATGATCGAGTGT 1308
Db 913 GCCTTGAACATGACAGTGGAGATCCGTGAGTGAACACCGGGAACATGATCGAGTGT 972
QY 1309 AGCTCAATCTTAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1368

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Db 973 AGTCAACTATATTGGGCTTGGTTATGGTTGGAAGACGACGATTTGTATTCCCTTTGTCT 1032
QY 1369 TTCTATCTAATCTAGCCAGAGAAATCAAGCGAGAAATCACTTTAATCATGCGAGTT 1428
Db 1033 TTCTATCTAATCTAGCCAGAGAAATCAAGCGAGAAATCACTTTAATCATGCGAGTT 1092
QY 1429 GTGATTTGGTGTCTGCTCATGAGAGTGTCTGATCTATCTATGCTCTTGATCAACAAG 1488
Db 1093 ATCATATGGTGGGAGGTCTCATGAGAGAGAGATCAATAGCATTTGCTATCAACAG 1152
QY 1489 TTACAGGCGCGGACACAGATGTACGCGGAATGCAATCATGATCAAGTACGATGATA 1548
Db 1153 TTACAGGCGCGGACACAGATGTACGCGGAATGCAATCATGATCAAGTACGATGATA 1212
QY 1549 ACTGTCTGTCTTTTACGACAG--TGGTGTGTTGGTATGCTGACCAACCACTCATAGCT 1606
Db 1213 ATTGTGTCTGTCTACAGAGTCTGGTGTGTTGTTGTTTATACCAAGCCTCTCCTCAATC 1272
QY 1607 ACCTATTACCGCACCAAGCGCCACACGAGCATGTTTATCTGATGACACACCCCAAAAT 1666
Db 1273 TCCTCATCCCAAGGCTTGACATAGCAGCTGATCTCTCAAGCCAGTCAATCATAGACC 1332
QY 1667 CCATACATATCCCTTTTGGACCAAGACTCGTTTCATGTAGGCTTTCAGGGAACCAATG 1726
Db 1333 CACTTCTTGAAGCCTGCTGGGTCTGACITTCGATGTAGCCAGCCCTCCCTCAGAACA 1392
QY 1727 TGGCTCGGCTGACATATAGTGGCTTTCTTGACAGGCCACTCGAACCGTGCATTAAT 1786
Db 1393 ACCTTCAGCTT-----CTTCTCACCATTACAGCTCGCTCCGTTTCATCGCG 1437
QY 1787 ACTGGAGACAAATTTGATGACTCTCTCATGCGACCCGCTCTTTGGAGGTCGTTGTATC 1846
Db 1438 TGTGGCGCAATTTGATGATAGATTATGCGCCGAGTGTTCGGGGCGGAGGCTTCGTT 1497
QY 1847 CTTTGTCTCAGTCTTCCAACTGAGAGAAACCTCTCTG 1885
Db 1498 CTTTGTCTCAGTCTTCCAACTGAGAGAAACCTCTCTG 1536

RESULT 13

US-10-425-114-21998
; Sequence 21998, Application US/10425114
; Publication No. US2004003488A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E.
; APPLICANT: Tabaska, Jack E.
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 21998
; LENGTH: 1014
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3356-014-Cl_FLI
US-10-425-114-21998

Query Match 21.5%; Score 468.2; DB 16; Length 1014;
Best Local Similarity 67.0%; Pred. No. 2.1e-105;
Matches 681; Conservative 0; Mismatches 333; Indels 3; Gaps 1;
QY 811 CTGTGATTCGAGAGGTTGTGATGATGCAAGCTAGCTGTTGTTTCAACGGGATT 870
Db 1 CTGTGTTCCGTTGGGAGTGTGTAACGATGCCACGCTCTGTTGCTCTTCAACGGCACTC 60
QY 871 CAGAGCTTTGATCTCACTCACTAAACCAAGAGCTGCTTTTCATCTTCTTGGAACTTC 930

Db 61 CAGACCTTCAUCTTAAACACATCGATGATGAGCGTTGTGCTGAATTTCTTGGGAACTTC 120
QY 931 TTGTATTTGTTTCTCCCTAAGTACCTTGTGTTGGTCTGCAACCGGCTGTGATAAGTGCAT 990
Db 121 TGTACTTATTCTGTCAAGCACCTTACTTGGAGTGTTTACTGATTTGCTCAGTGCCTAC 180
QY 991 GTTATCAAGAGCTATACITTTGGAAGGCACTCAACTGACCGAGAGGTTGCCCTTATGATG 1050
Db 181 ATAAITAAAGAGCTATATATAGGAAGGCATTTCCACTGACCGTGGGTTGGCTTATGATG 240
QY 1051 CTTATCGCGTATCTTTCTTATATGCTGTGAGCTTTTGCAGTTCAGTGGGCTATCTCACT 1110
Db 241 CTCATGGCTTACTCTTCTACATGCTGGCGAGCTGCTAGATCTGAGTGGCACTTCTTACC 300
QY 1111 GTGTTTTCTGTGTATGTGATGTCCCAATTAACATGCGACAAATGTAAACGAGAGCTCA 1170
Db 301 GTATTCTTCTGGGCATCGTGTATGCACATTAACCTGGCATTAATGTGACAGAGAGCTCA 360
QY 1171 AGAATAACAACAAGCATACCTTTGCAACTTTGTCATTTCTTGGGAGACATTTATTTTC 1230
Db 361 AGAGTCACAACCAAGCATGCTTTGCTACTTTGCTCTTCTTCTATCGCCGAGACTTTTCTTTC 420
QY 1231 TTGTATGTTGGAAATGATGCTTTGGACATTTGACAAGTGGAGATCCGCTGAGTGCACACCG 1290
Db 421 CTGTATGTCGGATGATGATGCCCTAGACATCGAGAAGTGGAGTTTGCAGTGCAGCCCC 480
QY 1291 GGAACATCGATCGAGTGCATCAATCCCTAAATGGTCTGCTCATGTTGGAAGAGCAGCG 1350
Db 481 GGTAAATCCATCGCATAGCTCGATTTTGTCTAGGGTTGTTCTGTTGGGAGAGCTGCA 540
QY 1351 TTGCTCTTCCGTTATCGTTTCTATCTAATCTAGCCAGAAATCAAGCGAGAAATC 1410
Db 541 TTTGTTTTCCCAATGTGTTTTTGTCCAACTGACAAGAAAGTCTCCATTTGGGAAATA 600
QY 1411 AACTTTAACAATGACAGTGTGATTTGTTGCTGCTGCTCATGAGAGTGTGTTATCTATG 1470
Db 601 ACATTTAGACAGCAAAATTTGATATATGTTGGGCTGGACTGATGAGAGTGGCTGTCATT 660
QY 1471 GCTTTTGACATAACAAGTTTACAAGGGCGGGGCACACAGATGTACGGGGAATGCAATC 1530
Db 661 GCTCTCGCTTACAACAAGTTTACAGAGATCTGGACACACTGAGCTGCACGCAACGCGATA 720
QY 1531 ATGATCAGAGTACGATACTGCTCTCTTTTGTAGCAGAGTGTGTTGTTGTTGCTGAC 1590
Db 721 ATGATCAGCAGCAGATCACTGTGCTCTTTTGTAGCACTATGTTGTTGGGATGATGAC 780
QY 1591 AAACCACTCATAGCTACCTATTACCGCACCAAGAACGCCACACGAGCATGTTATCTGAT 1650
Db 781 AAGCCATTTGATCGGCTGCTGCTCTGCTGCTGCAACAACAGGCCACCTCCGAGCGCTCC 840
QY 1651 GACAAACACCCCAAAATPCCATACATATFCCCTTTTGTGGACCAAGACTCGTTTCAATGAGCCT 1710
Db 841 TCACCCCAAGTCCCTGCACTCGCTCTCTCTGACGAGCATCGAGGCTCGGACATCGAGACG 900
QY 1711 TCAGGAAACCAATGTCCTGCGCTGACAGTATACGTTGGCTTTCTTGACAGGCCCACT 1770
Db 901 GGGTCGGCACAGATTGTG---AGGGCGTCCAGCTCCGGATGCTCTCTAAAGAACCAACC 957
QY 1771 CGAACCGTGCATTACTACTGAGAGACAAATTTGATGACTCTCTTCAATCGACCCGCTTTT 1827
Db 958 CACACGTTGCACTACTACTTGGGCAAGTTTCGAGAGCGGCTCATGCGGCCCATGTTT 1014

RESULT 14

US-09-770-423-408
; Sequence 408, Application US/09770423
; Publication No. US20020040490A1
; GENERAL INFORMATION:
; APPLICANT: Gorlach, Jörn
; APPLICANT: An, Yong-Qiang
; APPLICANT: Hamilton, Carol M.
; APPLICANT: Price, Jennifer L.

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OM nucleic - nucleic search, using sw model

Run on: October 20, 2004, 23:08:42 ; Search time 200 Seconds
(without alignments)
7740.491 Million cell updates/sec

Title: US-09-271-584A-1

Perfect score: 2178

Sequence: 1 cctctctgttctgtctctg.....aaaaaaaaaaaaaaaaaaaaa 2178

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 824507 seqs, 355394441 residues

Total number of hits satisfying chosen parameters: 1649014

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA:*

- 1: /cgn2_6/ptodata/1/ina/5A COMB.seq:*
- 2: /cgn2_6/ptodata/1/ina/5B COMB.seq:*
- 3: /cgn2_6/ptodata/1/ina/6A COMB.seq:*
- 4: /cgn2_6/ptodata/1/ina/6B COMB.seq:*
- 5: /cgn2_6/ptodata/1/ina/PCTUS COMB.seq:*
- 6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	91.2	4.2	1581	4	US-09-800-729-22
2	64.4	3.0	1354	4	US-09-800-729-58
3	64.4	3.0	1688	4	US-09-800-729-57
4	53.8	2.5	1291	4	US-09-524-1010-5
5	53.8	2.5	2007	3	US-08-747-221B-36
6	53.8	2.5	2007	3	US-08-747-221B-38
7	53.8	2.5	2007	3	US-09-005-051-36
8	53.8	2.5	2007	3	US-09-005-051-38
9	53.8	2.5	2007	4	US-09-403-942F-36
10	53.8	2.5	2007	4	US-09-403-942F-38
11	50	2.3	1141	4	US-09-806-708B-22
12	48.8	2.2	1169	3	US-09-100-391-5
13	48.8	2.2	1169	4	US-09-616-614-5
14	48.8	2.2	1302	3	US-09-100-391-11
15	48.8	2.2	1302	4	US-09-616-614-11
16	48.8	2.2	2643	3	US-09-100-391-9
17	48.8	2.2	2643	4	US-09-616-614-9
18	48.4	2.2	684	4	US-09-248-796A-6653
19	48.4	2.2	1664976	4	US-08-916-421B-1
20	48.4	2.2	1664976	4	US-09-692-570-1
21	47.8	2.2	832	4	US-09-621-976-2813
22	47.6	2.2	915	4	US-09-601-198-7
23	46.6	2.1	5852	1	US-07-867-106-2
24	46.4	2.1	640681	4	US-09-790-388-1
25	46	2.1	505	4	US-09-621-976-15639
26	46	2.1	3138	1	US-07-867-106-4
27	45.4	2.1	1466	3	US-08-984-919A-10

c	28	45.4	2.1	1466	3	US-08-984-919A-12	Sequence 12, Appl
c	29	45.4	2.1	1472	3	US-08-781-420-10	Sequence 10, Appl
c	30	45.4	2.1	1472	3	US-08-781-420-12	Sequence 12, Appl
c	31	45.4	2.1	1472	3	US-08-874-102-10	Sequence 10, Appl
c	32	45.4	2.1	1472	3	US-08-874-102-12	Sequence 12, Appl
c	33	45.4	2.1	1472	4	US-09-006-595A-10	Sequence 10, Appl
c	34	45.4	2.1	1472	4	US-09-006-595A-12	Sequence 12, Appl
c	35	45.4	2.1	1875	3	US-08-984-919A-46	Sequence 46, Appl
c	36	45.4	2.1	1875	3	US-08-984-919A-48	Sequence 48, Appl
c	37	45.4	2.1	1881	3	US-08-874-102-46	Sequence 48, Appl
c	38	45.4	2.1	1881	3	US-08-874-102-48	Sequence 48, Appl
c	39	45.4	2.1	2080	4	US-10-003-392-1	Sequence 1, Appl
c	40	45.4	2.1	4055	4	US-09-620-312D-706	Sequence 706, App
c	41	44.6	2.0	1313	4	US-09-149-476-112	Sequence 112, App
c	42	44.6	2.0	2519	4	US-09-380-287A-9	Sequence 9, Appl
c	43	44.4	2.0	1368	3	US-08-874-563-5	Sequence 5, Appl
c	44	44.4	2.0	1368	3	US-08-577-483-14	Sequence 14, Appl
c	45	44.4	2.0	4253	3	US-08-577-483-7	Sequence 7, Appl

ALIGNMENTS

RESULT 1

US-09-800-729-22
; Sequence 22, Application US/09800729
; Patent No. 6605592
; GENERAL INFORMATION:
; APPLICANT: Ni et al.
; TITLE OF INVENTION: 32 Human secreted proteins
; FILE REFERENCE: PZ044P1
; CURRENT APPLICATION NUMBER: US/09/800, 729
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: PCT/US00/26013
; PRIOR FILING DATE: 2000-09-22
; PRIOR APPLICATION NUMBER: 60/155,709
; PRIOR FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 217
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 22
; LENGTH: 1581
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (112)
; OTHER INFORMATION: n equals a.t.g, or c
; NAME/KEY: SITE
; LOCATION: (959)
; OTHER INFORMATION: n equals a.t.g, or c
; NAME/KEY: SITE
; LOCATION: (1565)
; OTHER INFORMATION: n equals a.t.g, or c
US-09-800-729-22

Query Match 4.2%; Score 91.2; DB 4; Length 1581;
Best Local Similarity 47.8%; Pred. No. 2.2e-13;
Matches 369; Conservative 6; Mismatches 370; Indels 30; Gaps 3;

QY	522	AGATCTTTCTTCATATATCTTTTGGCCACCATTATATCAATGACAGGGTTTCAAGTAA	581
Db	433	AGAGTATTTTTCAGAAATCTTGGATCTATACCTGCTTCTTGGGACTGC	492
QY	582	AAAGAACAGTTTTCCGCAATTCGTGACTATATGCTTTTGGTGTCTTTGGGACTAT	641
Db	493	GAAGAGACACTTTTTCAGAAATCTTGGATCTATACCTGCTTCTTGGGACTGC	552
QY	642	TATTTCTTCACATCATATCTAGGTGTAACACAGTCTTTAAAGATTTGACATTT	699
Db	553	TGKTTCATCTTTCATTTGGAATCTCATGTATGTTGGTGAAGTCATGAAGATTAT	612
QY	700	-----GGAACTTTGACTTGGTGGTATTTCTGCTATTGCTATTGCTGCTATTGCT	746

Db 613 GGGACAGCTCTCAGATAAAATTTACTACACAGAWTGKCTCTTTTGGAGCAATCATCTC 672
Qy 747 TGGACAGATTCAGATGATGACATGCGAGGTCTGAATCAAGACAGACACCTTTG---CT 803
Db 673 TGGCACTGACCCAGTACTGCTGGCGATATTTAATGAATGATGACAGAGTGGATCT 732
Qy 804 TTACAGTCTTCTATTCGGAGAGGGTGTGTGAATGATGCAACGTCAGTTGFGTCTTCAA 863
Db 733 TTACGCATCTTTTGGAGAGAGCGTCTTAATGAATGCTGTTCGCATTGKACTGKCTC 792
Qy 864 CGGATTCAGAGCTTTGATCTCACTCACTAAACCAAGAACTGCTTTTCAATCTTTG 923
Db 793 GTCTATTGTTGCCATACAGCCAGCGGACTGAACACTCACGCCCTTTGATGCTGCTG 852
Qy 924 AAACCTTCTGATTTGTTCTTCCAAAGTACCTTCTGTTGGTCTGCAACCGTCTGATA 983
Db 853 TTTTAAGTCAGTTGGCATTTTCTAGGTATATTTAGTGGCTCTTTTACCATTGGAGCT 912
Qy 984 TGCCTATGTTA-----TCAAGAAGCTATACCTTTTGAAGGCACTCAACTGACCG 1031
Db 913 GACTGGTGTGACTGCTGAGTCACTAAGTTTACCAAAKGCACNGCTTCCCGCTGCT 972
Qy 1032 AGAGTTGCCCTTATGATGCTTATGAGTATCTTTCTTATATGCTTGTGAGCTTTTCCA 1091
Db 973 GGAGACGGCGTGTCTTCTCATGCTCTGAGCAGCTTCTCTTTGGCAGAAGCTGCGG 1032
Qy 1092 CTTGAGCGGTATCTCACTGCTGTTTCTGTTGTTATGATGCTCCCATACATGCA 1151
Db 1033 ATTACAGGTGTGAGTCTGCTTTCTGTGGAATCACAAAGTCAATTACCTACAA 1092
Qy 1152 CAATGTACCGGAGAGCTCAAGAATAACAAAGCATACCTTTGCAACTTTTGTCAATTT 1211
Db 1093 CAATCTGCGTGGNAACAAGATCGAACCAAGCAGCTCTTTGAGGTGTTACATTTCT 1152
Qy 1212 TCGGAGACATTTATTTCTTCTGATGTTGGAATGATGCTTGGACATGACAAG 1266
Db 1153 GGCAGAGAACTTCATCTTCTCTACATGGGCTGGCACTGTTTACCTTCCAGAAG 1207

RESULT 2

US-09-800-729-58

; Sequence 58, Application US/09800729

; Patent No. 6605592

; GENERAL INFORMATION:

; APPLICANT: Ni et al.

; TITLE OF INVENTION: 32 Human secreted proteins

; FILE REFERENCE: P2044P1

; CURRENT APPLICATION NUMBER: US/09/800,729

; CURRENT FILING DATE: 2001-03-08

; PRIOR APPLICATION NUMBER: PCT/US00/26013

; PRIOR FILING DATE: 2000-09-22

; PRIOR APPLICATION NUMBER: 60/155,709

; PRIOR FILING DATE: 1999-09-24

; NUMBER OF SEQ ID NOS: 217

; SOFTWARE: Patent In Ver. 2.0

; SEQ ID NO 58

; LENGTH: 1354

; TYPE: DNA

; ORGANISM: Homo sapiens

US-09-800-729-58

Query Match

Best Local Similarity 3.0%; Score 64.4; DB 4; Length 1354;

Matches 128; Conservative 0; Mismatches 106; Indels 0; Gaps 0;

Qy 1033 GAGGTGCGCTTATGATGCTTATGCGGTATCTTTCTTATATGCTTGTGAGCTTTTCGAC 1092

Db 18 GAGACGGCGCTGTTCTTCTCATGTCCTGGAGCAGCTTCTCTTGGCAGAGCCCTGCGGA 77

Qy 1093 TTGAGCGGTATCCTCACTGCTGTTTCTGTTGATGATGCTGCCATTACATGCGAC 1152

Db 78 TTTACAGGTGTTGAGTGTCTCTTCTGTGGAATCACAAAGCTCAATTACCTTACCAAC 137

Qy 1153 AATGTACGGAGAGCTCAAGAATAACAAAGCATACCTTTGCAACTTTGTCAATTTCTT 1212
Db 138 AATCTGCGTGGAAATCAAGAAGTCGAACCAAGCAGCTCTTTGAGGTGTTACATTTCTG 197
Qy 1213 GCGGAGACATTTATTTCTTGTATGTTGGAATGGAATGCAATGCAATGACAAG 1266
Db 198 GCAGAGAACTTCATCTTCTCTACATGGGCTGGCACTGTTTACCTTCCAGAAG 251

RESULT 3

US-09-800-729-57

; Sequence 57, Application US/09800729

; Patent No. 6605592

; GENERAL INFORMATION:

; APPLICANT: Ni et al.

; TITLE OF INVENTION: 32 Human secreted proteins

; FILE REFERENCE: P2044P1

; CURRENT APPLICATION NUMBER: US/09/800,729

; CURRENT FILING DATE: 2001-03-08

; PRIOR APPLICATION NUMBER: PCT/US00/26013

; PRIOR FILING DATE: 2000-09-22

; PRIOR APPLICATION NUMBER: 60/155,709

; PRIOR FILING DATE: 1999-09-24

; NUMBER OF SEQ ID NOS: 217

; SOFTWARE: Patent In Ver. 2.0

; SEQ ID NO 57

; LENGTH: 1688

; TYPE: DNA

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: SITE

; LOCATION: (21)

; OTHER INFORMATION: n equals a,t,g, or c

; NAME/KEY: SITE

; LOCATION: (69)

; OTHER INFORMATION: n equals a,t,g, or c

; NAME/KEY: SITE

; LOCATION: (99)

; OTHER INFORMATION: n equals a,t,g, or c

US-09-800-729-57

Query Match

Best Local Similarity 3.0%; Score 54.4; DB 4; Length 1688;

Matches 128; Conservative 0; Mismatches 106; Indels 0; Gaps 0;

Qy 1033 GAGGTGCGCTTATGATGCTTATGCGGTATCTTTCTTATATGCTTGTGAGCTTTTCGAC 1092

Db 345 GAGACGGCGCTGTTCTTCTCATGTCCTGGAGCAGCTTCTTGGCAGAGCCCTGCGGA 404

Qy 1093 TTGAGCGGTATCCTCACTGCTGTTTTCTGTGTTATGATGTCCTCCATTACACATGGCAC 1152

Db 405 TTTACAGGTGTTGAGCTGTCTTTCTGTGMAATCACAAAGCTCAATTACACCTTACAAC 464

Qy 1153 AATGTACGGAGAGCTCAAGAATAACAAAGCATACCTTTGCAACTTTGTCAATTTCTT 1212

Db 465 AATCTGCGTGGAAATCAAGAAGTCGAACCAAGCAGCTTCTTGGAGGTGTTACATTTCTG 524

Qy 1213 GCGGAGACATTTATTTCTTGTATGTTGGAATGATGCTTGGACATGACAAG 1266

Db 525 GCAGAGAACTTCATCTTCTCTACATGGGCTGGCACTGTTTACCTTCCAGAAG 578

RESULT 4

US-09-524-101D-5

; Sequence 5, Application US/09524101D

; Patent No. 6762291

; GENERAL INFORMATION:

; APPLICANT: EXELIXIS, INC.

; TITLE OF INVENTION: INSECT P53 TUMOR SUPPRESSOR GENES AND PROTEINS

; FILE REFERENCE: EX00015C FIRST AMENDMENT

; CURRENT APPLICATION NUMBER: US/09/524,101D

; CURRENT FILING DATE: 2000-03-13

; PRIOR APPLICATION NUMBER: US 09/268,969

Qy 2014 CCTAACGTTTGTGAGACAGAAAGCAAAACATGGCAAATTTGAAGTGTTCATGATGAT 2073
 Db 173 CGCTCTCTTGAAGAACTGAACTAAATGATTAATGGAGCCACATATTATATTT 114
 Qy 2074 GTAATTATATCATATTTGTTTGTGTAACACAACTACACATTTGTTTATGTTTGA 2133
 Db 113 GATATTATACCATCTTGTATCATATTTGCTTTTATTTTTCATTTTTCATTTTCA 54
 Qy 2134 TTTGGTTTTCGTTTCGAAAAAATAAAAAAAAAAAAAAAAAAAAAA 2178
 Db 53 AATATATTTGTTTATTAATAAAAAAAAAAAAAAAAAAAAAA 9

RESULT 7
 ; Sequence 36, Application US/09005051
 ; Patent No. 6291222
 ; GENERAL INFORMATION:
 ; APPLICANT: Silver, Gary W.
 ; APPLICANT: Wisniewski, Nancy
 ; TITLE OF INVENTION: No. 6291222el Carboxylesterase Nucleic Acid
 ; TITLE OF INVENTION: Molecules, Proteins and Uses Thereof
 ; NUMBER OF SEQUENCES: 66
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Carol Talkington Verser, Ph.D.
 ; ADDRESSEE: Heska Corporation
 ; STREET: 1825 Sharp Point Drive
 ; CITY: Fort Collins
 ; STATE: Colorado
 ; COUNTRY: USA
 ; ZIP: 80525
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: Windows 95
 ; SOFTWARE: WordPerfect for Windows, Version 7.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/005,051
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/747,221
 ; FILING DATE: No. 6291222ember 12, 1996
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Verser, Carol Talkington
 ; REGISTRATION NUMBER: 37,459
 ; REFERENCE/DOCKET NUMBER: FC-1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 970/493-7272
 ; TELEFAX: 970/484-9505
 ; INFORMATION FOR SEQ ID NO: 36:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 2007 nucleotides
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cdna
 ; FEATURE:
 ; NAME/KEY: CDS
 ; LOCATION: 11..1594
 ; US-09-005-051-36

Query Match 2.5%; Score 53.8; DB 3; Length 2007;
 Best Local Similarity 52.4%; Pred. No. 0.00074;
 Matches 118; Conservative 0; Mismatches 107; Indels 0; Gaps 0;

Qy 1954 AAATTATGCTTTGTGTAATATATCCATTTGTAATATTTGTTGTGAGACAGAAATCTGT 2013
 Db 1775 AACAAATTCGTTTGTAGTGAATTCGCGCATTCACACAGATGGTGACTGTGCTAAATTTGT 1834
 Qy 2014 CCTAACGTTTGTGAGACAGAAAGCAAAACATGGCAAATTTGAAGTGTTCATGATGAT 2073
 Db 1835 CGCTCTCTTGAAGAACTGAACTAAATGTAATGGAGCCACATTTATATTT 1894

Qy 2074 GTAATTATATCATATTTGTTTGTGTAACACAACTACACATTTGTTTATGTTTGA 2133
 Db 1895 GATATTATACCATCTTGTATCATATTTGCTTTTATTTTTCATTTTTCATTTTCA 1954
 Qy 2134 TTTGGTTTTCGTTTCGAAAAAATAAAAAAAAAAAAAAAAAAAAAA 2178
 Db 1955 AATATATTTGTTTATTAATAAAAAAAAAAAAAAAAAAAAAA 1999

RESULT 8
 ; Sequence 38, Application US/09005051
 ; Patent No. 6291222
 ; GENERAL INFORMATION:
 ; APPLICANT: Silver, Gary W.
 ; APPLICANT: Wisniewski, Nancy
 ; TITLE OF INVENTION: No. 6291222el Carboxylesterase Nucleic Acid
 ; TITLE OF INVENTION: Molecules, Proteins and Uses Thereof
 ; NUMBER OF SEQUENCES: 66
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Carol Talkington Verser, Ph.D.
 ; ADDRESSEE: Heska Corporation
 ; STREET: 1825 Sharp Point Drive
 ; CITY: Fort Collins
 ; STATE: Colorado
 ; COUNTRY: USA
 ; ZIP: 80525
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: Windows 95
 ; SOFTWARE: WordPerfect for Windows, Version 7.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/005,051
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/747,221
 ; FILING DATE: No. 6291222ember 12, 1996
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Verser, Carol Talkington
 ; REGISTRATION NUMBER: 37,459
 ; REFERENCE/DOCKET NUMBER: FC-1
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 970/493-7272
 ; TELEFAX: 970/484-9505
 ; INFORMATION FOR SEQ ID NO: 38:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 2007 nucleotides
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cdna
 ; US-09-005-051-38

Query Match 2.5%; Score 53.8; DB 3; Length 2007;
 Best Local Similarity 52.4%; Pred. No. 0.00074;
 Matches 118; Conservative 0; Mismatches 107; Indels 0; Gaps 0;

Qy 1954 AAATTATGCTTTGTGTAATATATCCATTTGTAATATTTGTTGTGAGACAGAAATCTGT 2013
 Db 233 AACAAATTCGTTTGTAGTGAATTCGCGCATTCACACAGATGGTGACTGTGCTAAATTTGT 174
 Qy 2014 CCTAACGTTTGTGAGACAGAAAGCAAAACATGGCAAATTTGAAGTGTTCATGATGAT 2073
 Db 173 CGCTCTCTTGTGAAAGAACTGAACTAAATATGTAATGAGACCGCCACATTTATATTT 114
 Qy 2074 GTAATTATATCATATTTGTTTGTGTAACACAACTACACATTTGTTTATGTTTGA 2133
 Db 113 GATATTATACCATCTTGTATCATATTTGCTTTTATTTTTCATTTTTCATTTTCA 54
 Qy 2134 TTTGGTTTTCGTTTCGAAAAAATAAAAAAAAAAAAAAAAAAAAAA 2178

